

STIC Search Report Biotech-Chem Library

STIC Database Tracking Internation

TO: Emily M Le

Location: 3c35/3c18

Art Unit: 1648

Friday, June 03, 2005

Case Serial Number: 08/869386

From: Noble Jarrell

Location: Biotech-Chem Library

Rem 1B71

Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.
- If you encounter an accession number from an older search run against UniProt (results file extension .rup) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (UniPARC) at:

http://www.pir.uniprot.org/database/archive.shtml

If you have any questions regarding this information or your results, please contact any STIC searcher.

When submitting sequence search results for scanning into IFW, please include a copy of this attachment to assist any future Examiners or members of the public who may encounter UniProt temporary accession numbers.



This Page Blank (uspto)

135183 CRFE

Jarrell, Noble

4º 18 8

From: Le, Emily

Wednesday, June 01, 2005 6:34 PM Sent:

To: Jarrell, Noble

FW: Sequence Search: 08869386 Subject:

Hi Noble,

I noted a discrepancy in an amino acid residue present in SEQ ID NO: 3. Thus, please provide another search for seq id no:3, wherein the sequence is: NNTRKSIRIORGPGRAFVTIGKIG.

Thanks, Noble!!

----Original Message-----

Le, Emily

Sent:

Monday, May 16, 2005 12:04 PM

To:

Jarrell, Noble

Subject:

FW: Sequence Search: 08869386

update:

Please provide a search for the following:

1. RAFVTIGK, which is SEQ ID NO: 5 in the above case.

2. SEQ ID NO: 1 3. SEQ ID NO: 3

Please also limit the size to no more than 25 amino acids.

Thanks, Noble.

Emily

----Original Message-----

From:

Le, Emily

Sent:

Friday, May 13, 2005 4:13 PM

Jarrell, Noble

Subject:

Sequence Search: 08869386

Noble.

Please provide a search for the following:

1. RAFVTIGK

Please also limit the size to no more than 25 amino acids.

Thanks!

Emily Le

Malla Done (e13/05) AAA Compagne 116 (o prep (o onl

This Page Blank (uspto)

5.1.6 Compugen Ltd. GenCore version Copyright (c) 1993 - 2005

protein search, using sw model protein ĕ on:

Run

June 3, 2005, 03:11:57; Search time 38 Seconds (without alignments) 60.768 Million cell updates/sec

Title: Perfect score:

SEQ1 122 1 nntrkbiriqigpgrafvtigkig Sequence:

24

Scoring table:

BLOSUM62DX Gapop 10.0 , Gapext 0.5

283416 segs, 96216763 residues Searched:

Total number of hits satisfying chosen parameters:

4989

length: 0 length: 25 Bed Bed Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 250 summaries

Database

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	immunodeficiency v	glucose 1-dehydrog	Plasmepsin II - ma	por 1B	porin porl - Arabi	6-phosphofructokin	protein P7 - curle	exo-alpha-sialidas	translation initia	dihydrolipoamide S	T-cell receptor be	Ig kappa-1 chain J	T-cell receptor be	dissimilatory sulf	biliary glycoprote	hypothetical prote	incFVI protein - E	bombinin-like pept	. diaminopropionate	cytochrome-c oxida	T-cell receptor al	myosin heavy chain	heterocyst-inhibit	translation elonga	TcR delta chain V-	H+-exporting ATPas	flagellar core pro	core	protoporphyrinogen
SUMMARIES	865399	866213	S48654	PA0109	PA0045	803879	D28027	S11286	JN0264	A37823	PT0515	C53275	PH0915	S63490	S31427	C42856	S21511	D41575	A28524	865388	PH0797	151203	AF2093	S39153	149037	B53592	C47689	476	865629
Length DB	20 2				14 2	13 2	-					13 2	4	0	21 2	~	4						17 2				4	25 2	-
* Query Match I	52.5	23.8	22.1	21.7	21.7	21.3	0	0	20.5	20.1	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.3	•	18.9		18.9	•	18.9	18.9	•	18.9	18.0
Score	64	29	27	26.5	26.5	26	25	25	. 25	24.5	24	24	24	24	24	24	24	24	23.5	23	23	23	23	23	23	23	23	23	22
Result No.	1	8	m	4	ß	9	7	æ	6	10	11	12	13	14	15	16	17	18	19	20	21		23	24	25	56	27	28	29

tray protein - Esc superoxide dismuta Ca2+/calmodulin-de J-kappa recombinat T-cell receptor J-T-cell receptor J-T-cell receptor be hypothetical 2.5K H+-transporting tw cytochrome-c oxida histone H4-1 precu

Ig kappa chain V-I histone H4 - alfal extracellular mura

fibronectin recept cytochrome-c oxida

mannose-1-phosphat

insulin-like growt Ig heavy chain V r hydrogensulfite re

alanine racemase (heat shock protein neuromedin U - com

00014000000000000000000000000000000000	30 30 30 30 30 30 30 30 30 30 30 30 30 3	322 444 332 3444 3464 3464 3464 3464 346
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	844 844 844 844 844 844 844 844 844 844
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000
000018888888888888888888888888888888888	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 4 4 4 4 4 4 4 6 7 8 7 8 7 8 7 8 8 8 8 9 8 9 9 9 9 9 9 9
	S S O O O O O O O O O O O O O O O O O O	000000000000000000000000000000000000000
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	89 90 90 90 100 100 100 100 100

T-cell surface gly
dentinal flurface gly
dentinal flurface gly
dentinal flurface gly
probable transcrip
T-cell receptor be
probable transcrip
T-cell receptor Jhypothetical prote
T-cell receptor be
gene J protein - p
glyceraldehyde-3-p
peroxidase [EC 1.1
alpha-amylase inhi
cytochrome-c oxida
cytochromel protein
probable gag polym
ribosomal protein
cyt-cell receptor on
hypothetical E2 pr
T-cell receptor be
transforming prote
T-cell receptor al
T-cell receptor al
T-cell receptor al
T-cell receptor be
I call receptor be
I chain V-D-J r
histone H4 - commo
T-cell receptor be
T-cell receptor be
T-cell receptor be
T-cell receptor be
I cell receptor be
I cell receptor be
gly chain V-D-J r
histone H4 - chick
histone H4 - chick
histone H4 - chick
histone H4 - chick
histone H4 - sea u
translatin initia

	alpha T-cel	19 ne 3-de)	244K	serut	ig ne brad	brad	hypol	អ ស្ត្រ ស្ត្	א מיק	alph	alcol	d P	T-ce flt3	H+-t	chem	Ig h	T-10	T-Ce	T-Ce	prot	ribo	terr	T-ce	T-ce phot	T Ce	T-ce brai	d P	T-ce alph	tubu	vitr	flav	Crys	tet	T-Ce	jaca	lami	meta H+-t	T-CE	sper	191	prof	T-C	prob	I-8	trai	11.7 P.	D-E	Dnu	
																																														-			
005	A61457 F28587	S0352	A3309	B2056	PH134	D3719	D2855	C2090	52364 S2364	15017	B6130	PH134	15328	PTOOS	A3627	PT022	G4903	F5328	PH145	E5850	S7841	A4489	B494(	5050	1730	B4074	PH13	A494(	8602	S222.	\$174	E608	\$237	C494	\$296	\$284	A589	8472	PN00	PH13	S613	8471	F414	S162	PTOO	F840 S471	S472	S079 S475	
0	0 0	~ ~	~	9 79	0 N	010	9 (1	20	N (1	N	0 0	10	0 C	10	0 C	4 (4	0 0	N (N	7	0 0	10	W 4	7	010	4 (4	9	10	01 C	10	N -	(1)	N N	03 (	4 (4	01 (	N 10	0 0	4 (4	01 C	2 (2)	00	1 (1	01 (	N 64	0	N N	.010	4 W	
53:21	25 15	- 8			~ ~					-		11		-	-1-	-	-1 -	-,				-,-							•																				
90	16.4				•			•					•		•		•		•	• :	• •		: :																10.10	10	10.10	חו ח	10.1	0.10	10	IN IN	) IO II	വവ	
Jun 3		19.5 19.5	٦,	10	19	116	13	13	61 6	19	6 T F	19	19	161	19	19	13	ן ר <u>ן</u> 20	19	61 -	13	61.	13	61	1 F	61.	1 1	19	19	19	19	19	119	1 1	61.	10	19		19	1 6	170	19	119	1 L	19	91	6 6	7 F	ı
Fri	103	105	107	109	110	112	113	115	116	118	119	121	122	124	125	127	128	130	12	132 551	134	135	137	138	139	141	142	144	146	147	149	150	152	153	155	156	158	160	161	163	164	166	167	168	170	171	173	174	ا ر

										,																								
	•																																	
																														_			<b></b>	
PH1916 A53591 JC4804 S22333 PC2176	336 611 574	997	354	520	437	295	190	617 506	300	799	308	018	308	973	970	106	610	501	552	235	592	524	678	3422 1668	1322	324	1817	1817 3419	5332	3434	1278	3759	2055	8632
PH1 JC4 S22 PC2	PH1 T24 S07	S12 D26	F49 PH1	E37	S39	\$15	S24	A27 S26	833	PH0	E61 PH1	B28	G61	S21 S13	PA0 A56	PA0 A56	A28 JT0	H29	A35	PTG	A46	167	A35	149 A41	PC	2 2 3	B34	C34	A05	B3(	86	878	PE	S4
00000																																		
44444	445	222	222	121	00	י סי	0 0	010	27.	13 5	14	41	14	122	12	15	15	916	16	111	17	17	18	19	119	113	20	20	200	222	200	200	2122	21
	• • • • • • • • • • • • • • • • • • • •																																	
			، ب	1 (7 C	, ao a		. œ.	œ. œ.		æ.	œ. œ.		ه ن	ص من ه	œ. œ.		œ. œ.	م. ه. ه	<u>.</u> ه		. ω.	œ. æ.	œ. œ.	ω α	000	0 00	ω ω	۵. ۵.	α α	000	000	0000		8.
13515	15,13	15	155	15	14	44.	14	14	14	14 14	14	14	14	1.4	14	1 4 4	14	14	14	14.	14	14	14	14	41.	1 11	4 4	44	14	14	17.	17.	14 7	17
	2 9 9 9	999	99,	າທຸໝ		0 8 9	18	8 18	8 1	18	8 18	8 6	9 9	8 6 7	18	18	18	8 6	18	188	18	18	18 18	18	8 5	18	18 18	18	18	9 69 6	189	18	18 18	18
	11,111		,	18																														
	40000		~ ~ .		. ~ .	n ett i	in in	~ a		0 -1	0.0	1 4 4	n w	C 80	o 0	, H Q	ю 4.	ഗശ	8 7	n O :	H 73	ω <b>4</b> ,	ഗ	<b>ν</b> α		э н	ოთ	4 ru	91	- 00 0	0 -	- 12	. 4. r.	و ا
177 178 179 180	1 1 1 1 1 1	181	186	96.	66.6	1 1	19	19	16	202	20	200	200	20	20	212	21	21	21	22	22	22	2 2	2 2	122	7 7	23 23	23	23.5	2 2 6	3 7 7	556	2 22 2	. 2
		···					-																										_	
		.,								•			•										•		-									
		., .		-					_				•				**						,											
0 57			61 D				o) i	3.5	<u> </u>	പ്ര		ש כן י		a)	a a	 		00	• • • • • • • • • • • • • • • • • • •	10 O	ai O	f a	o o		ng ng	1	<b>*</b>	<b>H</b> .		មេខ	<u>.</u> (9)	нe	m eg	
r be J1 te d	P-co DJ	enti 2(V	rote in J	n c	chai	ogen DJ	r be ofor	ָּהָלְ אָלָּ	th f	CDR r be	r r r	r al	gal d - h	ein Pre	rote	i be	or be	ed s 1 DJ	or be	cha shee	otide Azo	ogena Pacif	otide	or be	smuta	cor - nase	ng tw	in pr	DQ c	rece	Jen 6	a 3(I drata	nitia prote	
bludse ptor be ain J1 inate d ingen -	ide 5 - lid P-co lain DJ	potenti potenti pha 2 (V	ıl prote chain J	chain d hain d s	ta chai	nydrogen nain DJ	ptor be	ting tw	rant pr growth f	nain CDR	eptor be	aptor al	and gal	protein -NADP re	al prote	aptor be	eptor be	ciated s nain DJ	eptor be oglobuli	ta-3 cha n - shee	peptide B - Azo	ydrogena - Pacif	peptide al prote	eptor be	dismuta	ceptor - teinase	rting tw	matin pr	hain DJ	n-7 rece	eptor J- ntigen 6	lpha 3(I ehydrata	n initia al prote	eptor of
ucosidase eceptor be consin Ji coquinate d	(Famide 5 - nyloid P-co / chain DJ	nn-potenti nn-potenti nalpha 2(V	ical prote a-1 chain J	a-2 chain d a chain J s	collagen -	dehydrogen 7 chain DJ	receptor be	sporting tw	tractant pr al growth f	y chain CDR	receptor be	receptor al	ney and gal kinase - h	al protein xin-NADP re	tical prote	receptor be receptor be	receptor be	ssociated s y chain DJ	receptor be acroglobuli	beta-3 cha ctin - shee	der peptide xin B - Azo	dehydrogena lin - Pacif	der peptide	receptor be	. Deta-1 cha ide dismuta	receptor - proteinase	sporting tw	hromatin pr	y chain DJ	e nitrate r ukin-7 rece	receptor J- e antigen 6	n alpha 3(I le dehydrata	ttion initia	receptor J-
a-glucostrase 11 receptor be eavy chain J1 hydroquinate d excantigen -	lrMkramide s - m amyloid P-co eavy chain DJ	ykinin-potenti ykinin-potenti agen albha 2(V	thetical prote appa-1 chain J	appa-2 chain J appa chain J s	opin beta chai	hol dehydrogen eavy chain DJ	11 receptor be ligand isofor	ransporting tw	oattractant pr ermal growth f	eavy chain CDR	11 receptor be	il receptor al	kidney and gal ein kinase - h	somal protein edoxin-NADP re	thetical prote	il receptor be il receptor be	11 receptor be	n-associated s leavy chain DJ	ill receptor be na-macroglobuli	llin beta-3 cha conectin - shee	leader peptide rodoxin B - Azo	ite dehydrogena stallin - Pacif	leader peptide	oll receptor be	ilin beta-1 Cha broxide dismuta	In B receptor -	pransporting tw	The confine property of the co	neavy chain DJ	bable nitrate r brleukin-7 rece	sal receptor J- cable antigen 6	lagen alpha 3(I erine dehydrata	nslation initia othetical prote	ell receptor J-
Ipha-glucostasse -cell receptor be g heavy chain Ji -dehydroquinate d 44K excantigen -	allifMkFamide 5 - erum amyloid P-co g heavy chain DJ 	radykinin-potenti radykinin-potenti Ollagen albha 2(V	ypothetical prote g kappa-1 chain J	g kappa-2 chain J g kappa chain J s	utropin beta chai	lcohol dehydrogen g heavy chain DJ	-cell receptor be	(+-transporting tw	hemoattractant pr pidermal growth f	g heavy chain CDR	-cell receptor be	-cell receptor al	:5K kidney and gal orotein kinase - h	ibosomal protein	lypothetical prote	rcell receptor be	r cell receptor be	orain-associated s Ig heavy chain DJ	r-cell receptor be	ubulin beta-3 cha vitronectin - shee	cet leader peptide Elavodoxin B - Azo	nalate dehydrogena crystallin - Pacif	cet leader peptide	Treel receptor be	jacalin beta-1 cha superoxide dismuta	lamin B receptor - netalloproteinase	H+-transporting tw	Sperm closeful pr Sperm chomatin pr Sperm chorical 2 5K	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	T-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	I-cell receptor U-
arpha-glucostudse T-cell receptor be Ig heavy chain J1 3-dehydroquinate d 244K excantigen -	callrMkramide 5 - serum amyloid P-co g heavy chain DJ brodyvinin-notenti	bradykinin-potenti bradykinin-potenti colladen albha 2(V	hypothetical prote Ig kappa-1 chain J	Ig kappa-2 chain J Ig kappa chain J s	lutropin beta chai	alcohol dehydrogen Ig heavy chain DJ	T-cell receptor be flt3 ligand isofor	H+-transporting tw	chemoattractant pr epidermal growth f	Ig heavy chain CDR	T-cell receptor be	T-cell receptor al	25K kidney and gal protein kinase - h	ribosomal protein ferredoxin-NADP re	hypothetical prote	1-cell receptor be T-cell receptor be whotcavetem II pro	T cell receptor be T-cell receptor be	brain-associated s Ig heavy chain DJ	T-cell receptor be alpha-macroglobuli	tubulin beta-3 cha vitronectin - shee	tet leader peptide flavodoxin B - Azo	malate dehydrogena crystallin - Pacif	tet leader peptide	Treel receptor be	jacalin beta-i cha superoxide dismuta	lamin B receptor - metalloproteinase	H+-transporting tw	sperm chromatin pr	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	T-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	T-cell receptor J-
atplia-glucostrane T-cell receptor be Ig heavy chain J1 3-dehydroquinate d 244K excantigen -	callifMkFamide 5 - serum amyloid P-co Ig heavy chain DJ	bradykinin-potenti bradykinin-potenti colladen albha 2 (V	hypothetical prote Ig kappa-1 chain J	Ig kappa-2 chain J Ig kappa chain J s	alpha-z collagen lutropin beta chai	alcohol dehydrogen Ig heavy chain DJ	T-cell receptor be flt3 ligand isofor	H-transporting tw	chemoattractant pr epidermal growth f	Ig heavy chain CDR	T-cell receptor be	T-cell receptor al	25K kidney and gal protein kinase - h	ribosomal protein ferredoxin-NADP re	hypothetical prote	1-cell receptor be T-cell receptor be whotoeverem II oro	Treell receptor be T-cell receptor be	brain-associated s Ig heavy chain DJ	T-cell receptor be alpha-macroglobuli	tubulin beta-3 cha vitronectin - shee	tet leader peptide flavodoxin B - Azo	malate dehydrogena crystallin - Pacif	tet leader peptide	Treell receptor be	jacalin beta-1 Cha superoxide dismuta	lamin B receptor - metalloproteinase	H+-transporting tw	sperm chromatin pr	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	T-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	T-cell receptor T-
arpha receptor be T-cell receptor be Ig heavy chain Jl 3-dehydroquinate d 244K excantigen -	callrewkramide 5 - serum amyloid P-co Igheavy chain DJ hysdydyin-notenti	bradykinin-potenti bradykinin-potenti colladen albha 2(V	hypothetical prote Ig kappa-1 chain J	Ig kappa-2 chain J Ig kappa chain J s	alpha-z collayen - lutropin beta chai	alcohol dehydrogen Ig heavy chain DJ	T-cell receptor be flt3 ligand isofor	H+-transporting tw	chemoattractant pr epidermal growth f	Ig heavy chain CDR	T-cell receptor be	T-cell receptor al	25K kidney and gal protein kinase – h	ribosomal protein ferredoxin-NADP re	hypothetical prote	I-cell receptor be T-cell receptor be whothowerem II wro	T cell receptor be T-cell receptor be	brain-associated s Ig heavy chain DJ	T-cell receptor be alpha-macroglobuli	tubulin beta-3 cha vitronectin - shee	tet leader peptide flavodoxin B - Azo	malate dehydrogena crystallin - Pacif	tet leader peptide hymorhetical prote	T-cell receptor be	jacalin Deta-1 Cha superoxide dismuta	lamin B receptor - metalloproteinase	H-transporting tw	sperm chromatin pr	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	T-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	T-cell receptor J-
arpha Jucostorase T-cell receptor be Ig heavy chain Jl 3-dehydroquinate d 244K excantigen -	callirMkFamide 5 - serum amyloid P-co Ig heavy chain DJ	bradykinin-potenti bradykinin-potenti colladen alpha 2(V	hypothetical prote Ig kappa-1 chain J	Ig kappa-2 chain o Ig kappa chain J s	alpha-z collayen - lutropin beta chai	alcohol dehydrogen Ig heavy chain DJ	T-cell receptor be flt3 ligand isofor	H-transporting tw	chemoattractant pr epidermal growth f	Ig heavy chain CDR	T-cell receptor be	T-cell receptor al	25K kidney and gal protein kinase - h	ribosomal protein ferredoxin-NADP re	hypothetical prote	1-cell receptor be T-cell receptor be	T cell receptor be T-cell receptor be	brain-associated s Ig heavy chain DJ	T-cell receptor be alpha-macroglobuli	tubulin beta-3 cha vitronectin - shee	tet leader peptide flavodoxin B - Azo	malate dehydrogena crystallin - Pacif	tet leader peptide	T-cell receptor be	jacalin beta-1 cha superoxide dismuta	lamin B receptor - metalloproteinase	H+-transporting tw	sperm chromatin pr	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	r-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	T-Cell receptor U-
arpha-graces T-cell receptor be Ig heavy chain J1 3-dehydroquinate d 244K excantigen -	callrMkramide 5 - serum amyloid P-co Ig heavy chain DJ hradvivin noctenti	bradykinin-potenti bradykinin-potenti colladen alpha 2(V	hypothetical prote Ig kappa-1 chain J	Ig kappa-2 chain J Ig kappa chain J s	lutropin beta chai	alcohol dehydrogen Ig heavy chain DJ	T-cell receptor be flt3 ligand isofor	H+-transporting tw	chemoattractant pr epidermal growth f	Ig heavy chain CDR	T-cell receptor be	T-cell receptor al	25K kidney and gal protein kinase - h	ribosomal protein ferredoxin-NADP re	hypothetical prote	1-cell receptor be T-cell receptor be whotoevetem II pro	T cell receptor be T-cell receptor be	brain-associated s Ig heavy chain DJ	T-cell receptor be alpha-macroglobuli	tubulin beta-3 cha vitronectin - shee	tet leader peptide flavodoxin B - Azo	malate dehydrogena crystallin - Pacif	tet leader peptide	T-cell receptor be	jacalin beta-i cha superoxide dismuta	lamin B receptor - metalloproteinase	H-transporting tw	sperical pr	Ig heavy chain DJ	probable nitrate r interleukin-7 rece	T-cell receptor J- probable antigen 6	collagen alpha 3(I L-serine dehydrata	translation initia hypothetical prote	T-CELL RECEDENT U-
A61457 P28587 S03528 A47687	E41978 B20569 PH1345	C37196 D37196 B46662	D28551 C20907	F20907 S23640	150173 B61309	S11074 PH1342	I53284 I78838	PT0091	A36279 S08301	PT0224	B28587	F53284 PH1453	E58501 I37452	S78415 A44897	A33171	B49404 D53284	303033 173024 B40741	A61392 PH1350	A49404 S70612	S60269 S22233	LFBSTU S17461	S04961 E60894	S23742	126/46 C49404	S29636 PQ0732	S28405 A58903	B35473	PN0082	JUZI36 PH1369	S61306 B40256	S47193 F41476	S64675 S16224	PT0052 F84018	847191
5 2 A61457 5 2 P8587 8 2 S03528 0 2 A47687 7 2 A31098	2 B41978 2 B20569 2 PH1345	2 C37196 2 D37196 3 B46662	2 D28551 2 C20907	2 F20907 2 S23640	2 150173 2 B61309	2 S11074 2 PH1342	2 I53284 2 I78838	2 PT0091	2 A36279 2 S08301	2 PT0224	2 B2887	.2 F53284 2 PH1453	2 E58501 2 I37452	2 S78415 2 A44897	4 A33171	2 B49404 2 D53284 3 C55033	2 303033 2 173024 2 840741	2 A61392 2 PH1350	2 A49404 2 S70612	2 S60269 2 S22233	1 LFBSTU 2 S17461	2 S04961 2 R60894	2 S23742	2 C49404	) 2 S29636 ) 2 PQ0732	) 2 S28405 ) 2 A58903	2 B35473	2 S4/203	2 JUZI96   2 PH1369	l 2 S61306 2 2 B40256	2	2 2 S64675 2 2 S16224	2 2 PT0052 2 2 F84018	3 2 847191
5 2 A61457 5 2 P8587 8 2 S03528 0 2 A47687 7 2 A31098	2 B41978 2 B20569 2 PH1345	2 C37196 2 D37196 2 B46662	2 D28551 2 C20907	2 F20907 2 S23640	2 150173 2 B61309	2 S11074 2 PH1342	2 I53284 2 I78838	2 PT0091	2 A36279 2 S08301	2 PT0224	2 B2887	.2 F53284 2 PH1453	2 E58501 2 I37452	2 S78415 2 A44897	4 A33171	2 B49404 2 D53284 3 C55033	2 303033 2 173024 2 840741	2 A61392 2 PH1350	2 A49404 2 S70612	2 S60269 2 S22233	1 LFBSTU 2 S17461	2 S04961 2 B60894	2 S23742	2 C49404	) 2 S29636 ) 2 PQ0732	) 2 S28405 ) 2 A58903	2 B35473	2 S4/203	2 JUZI96   2 PH1369	l 2 S61306 2 2 B40256	2	2 2 S64675 2 2 S16224	2 2 PT0052 2 2 F84018	3 2 847191
6.4 25 2 A61457 alpha-glucosloase 6.0 15 2 F28587 T-cell receptor be 6.0 20 2 A47687 IG heavy chain J1 6.0 20 2 A47687 3-dehydroquinate d 5.6 7 2 A33098 244K excantigen -	6 9 2 E41978 6 9 2 B20569 6 10 2 PH1345	6 11 2 C37196 6 11 2 D37196 13 3 BAKKK3	6 12 2 D28551 6 12 2 C20907	6 12 2 F20907 6 13 2 S23640	6 13 2 150173 6 14 2 B61309	6 14 2 S11074 6 15 2 PH1342	6 15 2 153284 6 15 2 178818	5 2 PT/0091	6 15 2 A36279 6 15 2 S08301	6 16 2 PT0224	6 16 2 B28587	6 16 2 F53284 6 16 2 PH1453	6 16 2 E58501 6 16 2 137452	6 16 2 578415 6 16 2 84897	6 16 4 333171	6 17 2 B49404 6 17 2 D53284	6 18 2 173024 6 18 2 173024 6 18 2 840741	6 18 2 A61392 6 18 2 PH1350	6 18 2 A49404 6 18 2 S70612	6 19 2 S60269 6 19 2 S22233	6 20 1 LFBSTU 6 20 2 S17461	6 20 2 S04961 6 20 2 R60894	6 20 2 823742	6 20 2 C49404	6 20 2 S29636 6 20 2 PQ0732	6 20 2 S28405 6 20 2 A58903	6 20 2 B35473	5 21 2 S#7203	6 21 2 JUZI96 6 21 2 PH1369	.6 21 2 S61306 .6 22 2 B40256	.6 22 2 S47193 .6 22 2 F41476	.6 22 2 S64675 .6 22 2 S16224	.6 22 2 PT0052 .6 22 2 F84018	.6 23 2 847191 

MSEL-neurophysin T-cell receptor be
envelope protein J - p
gene J protein J - p
gene J protein - p
language J protein
generatic endopep
T-cell receptor be
Igheavy chain bJ
Judathione transf
hypothetical protein
Judathione transf
Judathione transf
Judathione transf
hypothetical protein
Judathione transf
Judathione Judath
Judath
Judath Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
Judath
J

```
porin porl - Arabidopsis thaliana (fragment)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: PA0049;
R;Kamo, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.
Submitted to JIPID, July 1994
A;Rescription: Separation and characterization of Arabidopsis proteins by two-dimensions
A;Reference number: PA0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6-phosphofructokinase (EC 2.7.1.11) B - rabbit (fragment)
N.Alternate names: phosphofructo-1-kinase B
C; Species: Oryctolagus cuniculus (domestic rabbit)
C; Species: Oryctolagus cuniculus (domestic rabbit)
C; Species: Oryctolagus cuniculus (domestic rabbit)
C; Species: Oryctolagus cuniculus
C; Species: Sol3879
R; Valaitis, A.P.; Foe, L.G.; Kwiatkowska, D.; Latshaw, S.P.; Kemp, R.G.
Biochim: Biophys. Acta 995, 187-194, 1989
A; Title: The sites of phosphorylation of rabbit brain phosphofructo-1-kinase by cyclic A
A; Reference number: S03878; MUID:89194250; PMID:2539199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                    ô
                                                                                                                                                                                                                                                                                                                                     C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Daceses: Appr-1995 #sequence_revision 26-May-1995 #text_change 09-Jul-2004
C;Accession: PAO109
R;Kamo, M.; Kawakami, T.; Tsugita, A.
submitted to JIPID, March 1995
A;Reference number: PAO109
A;Reference number: PAO109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                       5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21.7%; Score 26.5; DB 2; 50.0%; Pred. No. 8.9e+02; rative 2; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 26.5; DB 2;
Pred. No. 8.9e+02;
2; Mismatches 3;
                   Score 27; DB 2;
Pred. No. 1e+03;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 1-14 «KAM»
A;Cros:-references: UNIPROT:Q8LA84; UNIPROT:Q42292
A;Experimental source: root
                                                                                                                                                                                                                                                                                                               porin por 1B - Arabidopsis thaliana (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Mesidues: 1-14 «KXM»
A;Cross-references: UNIRROT:Q7MIW9
A;Experimental source: root
                   Query Match 22.1%;
Best Local Similarity 50.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21.7%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 50.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 50.0
Matches 6; Conservative
                                                                                                                                                                             9 OMGRGSEHLTIG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 RGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11 RGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 KGPG-LYTEIGK 12
                                                                                                                         10 QRGPGRAFVTIG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 KGPG-LYTEIGK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: protein A; Residues: 1-13 < VAL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 5
                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                     C;Species: Homo sapiens (man)
C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999
C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999
C;Accession: S653, M: Futaki, S.; Okumura, Y.; Kido, H.

Eur. J. Biochem. 237, 64-70, 1996
A;Title: T-cell membrane-associated serine protease, tryptase TL(2), binds human immunodeficiency virus type 1 inhibit cleavage of gp120.
A;Reference number: S65399
A;Accession: S65399
A;Accession: S65399
A;Accession: S65399
A;Accession: S65399
C;Superfamily: type: protein
A;Residues: 1-10;11-20 «NIW»
C;Superfamily: type E retrovirus env polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
S66213
S10208 - I-dehydrogenase (EC 1.1.1.47) - Haloferax mediterranei (fragment)
C;Species: Haloferax mediterranei
C;Date: 14-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S66213
R;Bonete, M.J; Pire, C; LLorca, F.I.; Camacho, M.L.
FBBS Lett. 381, 227-229, 1996
A;Title: Glucose dehydrogenase from the halophilic Archaeon Haloferax mediterranei: enzy
A;Reference number: S66213; MUD:96198607; PMID:8925901
A;Accession: S66213
A;Residues: protein
A;Residues: 1-17 &BON-A;Accession: S66213
A;Residues: 1-17 &BON-A;Accession: S66213
C;Keywords: oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
$48654
Plaemepsin II - malaria parasite (Plasmodium falciparum)
C;Species: Plasmodium falciparum
C;Species: Plasmodium falciparum
C;Species: Dlasmodium falciparum
C;Species: Dlasmodium falciparum
C;Species: Dlasmodium falciparum
C;Species: Dlasmodium falciparum
C;Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jun-2000
C;Accession: 848654
R;Hill, J.; Tyas, L.; Phylip, L.H.; Kay, J.; Dunn, B.M.; Berry, C.
FEBS Lett. 352, 155-158, 1994
A;Title: High level expression and characterisation of Plasmepsin II, an aspartic protein A;Reference number: 848654
A;Reference number: 848654
A;Reterence number: 848654
A;Reterence preliminary
A;Reterence preliminary
A;Reterence preliminary
A;Reterence number: C;Catle
A;Residues: 1-20 cHIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
glyceraldehyde-3-p
N4-(beta-N-acetylg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 64; DB 2; Length 20;
Pred. No. 0.001;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                  immunodeficiency virus type 1, HIV-1 gp120 - human (fragments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 29; DB 2; I
Pred. No. 4.2e+02;
3; Mismatches 5;
                                                                                                   ALIGNMENTS
B60475
JN0911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 KSIRIQRGPGRAFV 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 KAIAVKRGEDRPVV 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 RGPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RGPGRAFVTIGRI 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
```

Query Match

ð 셤 g

```
Query Match
Best Local Similarity 80.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : | : | | | |
1 QATINIGTIG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                15 RAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 GP-GRAFVT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GPKGRVFVS 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: protein
A; Residues: 1-17 <RAH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12 GPGRA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: A37823
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GPGQA 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Siliano exo-alpha-sialidase (EC 3.2.1.18) - influenza A virus (strain A/FPV/Rostock/34 [H7N1]) (
N;Alternate names: neuraminidase
C;Bpecies: influenza A virus
C;Bace: influenza A virus
C;Bace: influenza A virus
A;Robertson, J.S.
Nucleic Aida Segments of influenza A;Molecule type: genomic RNA
A;Rosidues: 1-12 <ROB>
A;Molecule type: genomic RNA
A;Rosidues: 1-12 <ROB>
A;Molecule type: genomic RNA
A;Croser references: EMBL:J02114; NID:g324483; PIDN:AAA43398.1; PID:g324486
C;Genetics:
C;Genetics:
C;Genetics:
C;Genetics:
A;Map position: segment 6
C;Superfamily: influenza virus exo-alpha-sialidase
C;Keywords: glycosidase; hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                  protein P7 - curled-leaved tobacco (fragment)
C;Species: Nicotiana plumbaginifolia (curled-leaved tobacco)
C;Species: Nicotiana plumbaginifolia (curled-leaved tobacco)
C;Species: 19-May-1989 #sequence_revision 19-May-1989 #text_change 09-Jul-2004
C;Accession: D28027
R;Bauw, G; De Loose, M.; Inze, D.; Van Montagu, M.; Vandekerckhove, J.
A;Tatle: Alterations in the phenotype of plant cells studied by NH2-terminal amino acid-A;Reference number: A94167
A;Accession: D28027
A;Accession: D28027
A;Molecule type: protein
A;Residues: 1-10 <-BAU>
A;Cross-references: UNIPROT:Q7M1V8
A;Cross-references: UNIPROT:Q7M3F5
A;Note: the sequence from the summary is inconsistent with that from table I and Fig.
C;Keywords: glycolysis; phosphotransferase
                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            translation initiation factor eIF-2 gamma chain - pig (fragment)
N;Alternate names: eIF2 gamma chain
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 09-Jul-2004
C;Accession: JN0264
                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                         Query Match
21.3%; Score 26; DB 2; Length 13;
Best Local Similarity 40.0%; Pred. No. 1e+03;
Matches 4; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20.5%; Score 25; DB 2; Length 10; 71.4%; Pred. No. 1.18+03; Live 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20.5%; Score 25; DB 2; I
44.4%; Pred. No. 1.3e+03;
live 2; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 71.4
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 44.4
Matches 4; Conservative
                                                                                                                                                                                                                                                   3 TRRSLSMDKG 12
                                                                                                                                                                                                                      3 TRKSIRIQRG 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : : | | |
PNQKIITIG 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 PGRAFVTIG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 GRAFVTI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ||:|| |
GRSFVPI 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
R.Rahmatullah, M.; Radke, G.A.; Andrews, P.C.; Roche, T.E.
D. Blol. Chem. 256; 14512-14517, 1990
A.Title: Changes in the core of the mammalian-pyruvate dehydrogenase complex upon select
A.Reference number: A37823; MUID:90354445; PMID:2167319
R;Mukouyama, E.B.; Shiokawa, H.; Suzuki, H.
Biosci. Biotechnol. Biochem. 56, 680-681, 1992
A;Title: GTP-binding sequences in the gamma subunit of pig liver initiation factor 2.
A;Reference number: JN0264; MUID:92282179; PMID:1368212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R; Feeney, A.J.

J. Exp. Med. 174, 115-124, 1991

A; Title: Junctional sequences of fetal T cell receptor beta chains have few N regions. A; Reference number: PT0509; MUID:91277601; PMID:1711558

A; Accession: PT0515

A; Accession: PT0515

A; Molecule type: mRNA
A; Residues: 1-7 < FEE>
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Bos primigenius taurus (cattle)
C;Date: 30-Apr-1991 #sequence_revision 30-Apr-1991 #text_change 09-Jul-2004
C;Accession: A37823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dihydrolipoamide S-acetyltransferase (BC 2.3.1.12) - bovine (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T-cell receptor beta chain V-D-J region (100-4AE) - mouse (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                            Query Match 20.5%; Score 25; DB 2; Length 16; Best Local Similarity 50.0%; Pred. No. 1.8e+03; Matches 5; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 24.5; DB 2;
Pred. No. 2.3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 24; DB 2; I
Pred. No. 2.8e+05;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A, Experimental source: adult thymus, strain BALB/c
C, Keywords: T-cell receptor
                                                                                                                A Accession: JN0264
A Molecule type: protein
A; Residues: 1-16 <MUK>
A; Cross-references: UNIPROT: Q9TRQ9
A; Experimental source: liver
C; Reywords: GTP binding
F;1-16/Region: GTP binding #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A, Cross-references: UNIPROT:Q7M2M8
C, Keywords: acyltransferase; coenzyme A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 20.1%;
Best Local Similarity 66.7%;
Matches 6; Conservative
```

```
Cyaccesion: S31427

Expedilec, P.; Turbide, C.; Barnett, T.R.; Beauchemin, N.

Expedilec, P.; Turbide, C.; Barnett, T.R.; Beauchemin, N.

Expedilec, P.; Turbide, C.; Barnett, T.R.; Beauchemin, N.

Expedilec, P.; Turbide, C.; Barnett, T.R.;

Expedilec, P.; Turbide, C.; Barnett, T.R.;

Expedilec, P.; Turbide, C.; Barnett, T.R.;

Expedilec, P.; Turbide, T.R.;

Expedilec, P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Homo sapiens (man)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 07-Feb-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 24; DB 2; Length 21;
Pred. No. 3.3e+03;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: June 3, 2005, 03:21:13 Job time: 44 sec8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 80.0%;
Matches 4; Conservative
                                                                   10 QLESGPWPSFV 20
8 RIQRGPGRAFV 18
                                                                                                                                                                                                                                                                                                                                                                                                            biliary glycoprotein - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13 PGRAF 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 PGRGF 18
                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C.Species: Rattus norvegicus (Norway rat)
C.Species: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 30-May-1997
C.Accession: Ph0915
B.Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A.Title: Analysis of T cell receptor beta chains in Lewis rats with experimental allergi A.Title: Analysis of T cell receptor beta chains in Lewis rats with experimental allergi A.McGession: PH0915
A.Molecule type: mRNA
A.Resion: PH0915
A.Resions: 1-14 GOLD.
A.Respectmental source: concanavalin A-activated lymphoblast
A.Repertmental source: concanavalin A-activated lymphoblast
A.Roywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                s63490
dissimilatory sulfite reductase alpha chain, soluble - Desulfovibrio desulfuricans (frag
C;Species: Desulfovibrio desulfuricans
C;Species: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S63490
C;Accession: S63490
S;Steuber, J.; Arendsen, A.F.; Hagen, W.R.; Kroneck, P.M.H.
Bur. J. ablochem. 233, 873-879, 1995
A;Title: Molecular properties of the dissimilatory sulfite reductase from Desulfovibrio
A;Reference number: S63489; MUID:96085152; PMID:8521853
                        C53275

Ig kappa-1 chain J3 segment b95 allotype - rabbit (fragment)

Ig kappa-1 chain J3 segment b95 allotype - rabbit (fragment)

C; Species Orycrolagus cuniculus (domestic rabbit)

C; Date: 02-May-1994 #sequence_revision 18-Nov-1994 #text_change 16-Aug-1996

C; Accession: C53275

C; Accession: C53275

A; Aydai, H; Marche, P.N.; Cazenave, P.A.

Immunogenetics 34, 201-207, 1991

A; Reference number: A53275; MUD:91372868; PMID:1909995

A; Reference number: A53275

A; Reference number: A53275

A; Molecule type: DNA

A; Mole
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19.7%; Score 24; DB 2; Length 13; 100.0%; Pred. No. 2.1e+03; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 19.7%; Score 24; DB 2; Length 14; Best Local Similarity 50.0%; Pred. No. 2.3e+03; Matches 4; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 19.7%; Score 24; DB 2; Length 20; Best Local Similarity 36.4%; Pred. No. 3.2e+03; Matches 4; Conservative 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Status: preliminary
A,Molecule type: protein
A,Auleus: 1-20 «STE»
A,Crose-references: UNIPROT:09R4H4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 19.7
Best Local Similarity 100.
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 ORGPGRAF 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :|| | |:
4 RRGTGEAY 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 RGPG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RGPG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PH0915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઢ
```

ö

Gaps ö

Length 21;

This Page Blank (uspto)

	Ltd.
5.1.6	Compugen
version	- 2005
<b>3enCore</b>	1993
ဗီ	Û
	Copyright

3, 2005, 03:03:22 ; Search time 171 Seconds (without alignments) 71.871 Million cell updates/sec OM protein - protein search, using sw model June Run on:

SEQ1 122 1 nntrkeiriqrgpgrafvtigkig 24 Title: Perfect score: Sequence:

Scoring table:

1612378 seqs, 512079187 residues BLOSUM62DX Gapop 10.0 , Gapext 0.5 Searched:

16988 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 25

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 250 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	·
Description	Q9e897 human immun Q8aqx9 human immun Q8aqx9 human immun Q8aqy1 human immun Q8aqy2 human immun Q9qex7 human immun Q9qex7 human immun Q9pxf1 human immun Q9xf1 human immun Q9xf1 human immun Q9xf1 human immun Q9xf1 human immun Q9xf4 human immun Q9rq6 buchnera ap Q9ucl homo sapien Q9ucl homo sapien Q9ucl homo sapien Q9ucl homo sapien Q6cmll gallus gall Q94c7 mas musculu Q7m3f5 oryctolagus Q7m3f5 oryctolagus Q7m3f5 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q7m3f6 oryctolagus Q6cml asalius gall Q95g65 chlamydia t Q6jcn3 escherichia Q6cx2 pseudomonas Q6cx2 pseudomonas Q6cx2 pseudomonas
SUMMARIES	998857 98AQYO 98AQYO 99AQYI 99AQYI 99CXT 99CXT 99CXT 99CXT 99CXT 99CXT 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CXD 99CX
DB	
Length DB	
% Query Match	22222222222222222222222222222222222222
Score	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	1 0 6 7 8 6 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

O6tqt6 saccharomyc G6u2n2 citrullus 1 G9rg50 buchnera ap G6996 lycopersico G7m1v8 nicotiana p G69403 influenza a G61017 ascaries suu G9p2a2 homo sapien G8562 reovirus ty G8565 subterranea G96576 subterranea G90cj7 homo sapien G90cj7 sus scropithec G90cj3 cercopithec G90cj3 pachycondyl G90cj3 pachycococ G9173 yersinia pe G9139 plasmodium G70cj2 streptococc G914a4 desulfcvibr F81622 streptococc G914a4 oerskovia x E29005 bombina ori P8391 leptodactyl	O8jh96 anthus span (8)h97 anthus span (8)h97 anthus span (9) crkl canis famil 08524 chlamydia t P80625 zea may9 (m 6)txwl babesia ovi 07wuf pseudomonas (6)xa08 equus cabal (5)xa08 equus equus (6)xa08 equus equus (6)xa08 equus equus (6)xa08 equus equus (6)xa08 eq
06TQT6 06UZN2 09RQ50 09RQ50 06HUZN2 08EY6 07HUZN3 08EZ76 09EZ76 09UGJ7 09PRQ9 09ORX12 09PRQ1	084195 084197 085524 085524 COXO RAI UC19_NAIZE 067XNI 077018 067X08 078374 078381 078381 078381 078381 078381 078381 078381 078419 078419 077200 097781 097781 097781 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800 077800
444500044400000000000044640100067600000014000 000000000000000000000000000	
2,448,244,444,444,444,444,444,444,444,44	24122212121222222222222222222222222222
22000000000000000000000000000000000000	
444 W	5.5.5.5.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3
๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚๚	00000000000000000000000000000000000000

.rup
seq1

P80540 actaovorax Qeeml4 meleagris g Qeeml5 gallus gall Q78323 human immun Q78327 human immun		Q8vdm2 mus musculu	Q90790 gailus gail P84158 cucurbita m	Q8k5b7 rattus norv	methan	Q7r9q5 plasmodium	P92689 podospora a	Ogsens brassica na	neisseria	Thodococci				foot-and			091bd3 xanthomonas	OBK3D6 mus muscuiu	Oscilla polyomavitu	Q86IQ2 prasmourum	Obeline nicotiana t	Office erwinia amy	O9r513 porphyromon	murine	human i	numan	٦٠٠٦	human	human		-		-	O9la84 rhodobacter		Q9qex4 human immun		Obsus/ pan crogrod	שכ	<b>F</b>		P82357 pseudacanth		Q4916/ metmanobact	O9twe4 lumbricus t	077604 macaca mula			Osmiai sus scrota			ω	Q53499 enterobacte	Ogucc7 homo sapien	Q9eup4 thermus the
MDH_ACIDE Q6EML4 Q6EML5 Q78323 Q78327				Q8K5E																							O90GF0																					2 077832					05349		2 Q9EUP4
17 17 17 27 17 20 71																																																							
17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	27.7	7	17.7	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	7.77	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	16.8 16.8
221221	217	21	21	517	21	2.1	21	21	21	21	21	21	4 7	7 .	21	21	21	21	21	21	21	51	7.7	2.1	21	21	21	21	1 2	21	21	21	21	21	21	21	21	21	27	77	21	21	21	21	5 5	77.	17	21	21	21	21	217	21	21	20.5
178 179 180 181	183	185 186	187	189	190	161	193	194	195	196	197	198	661	200	202	203	204	205	206	207	208	209	210	211	213	214	215	216	218	219	220	221	222	224	225	226	228	229	230	231	233	234	235	236	237	238	23.5	241	242	243	244 244	246	247	4.	249 250
Q9qvk8 mus sp. mep Q16045 homo sapien O10226 human immun O10227 human immun	O10228 numan immun O10232 human immun O10233 human immun	Q661t4 borrelia ga	O55090 shigella so	Q9smc7 lycopersico	P82419 pachycondyl	P82420 pachycondy1	Ocosof ratting norv	O9cva4 mus musculu	0905e4 human immun	Q905q4 human immun	P05542 ovis aries	P07448 rattus norv	P81407 mycoplasma	07s7i7 neurospora	Ostroy bos caurus	ő	Colour min miscilli	Ogh4z8 homo sapien	0641i1 gorilla gor	Ogrego chlamydia t	O88229 mus musculu	Q9r204 mus musculu	P82939 hordeum vul	Q52435 burkholderi	Obibbl escherichia	034890 bacillus su	O9zg66 chlamydia t	P82204 bombyx mori	O7rjy9 plasmodium	0/2006 Humman Immuni P82875 rana clamit	P82741 rana catesb	O	Q7pgf4 anopheles g	Ogmojgo Bus Sciola	O60839 mus musculu	Q71uf5 rattus norv	Oll890 gb virus c/	011893 qb virus c/	Q66ms0 human immun	O9tqy9 sus scrofa	002830 oryctolagus	Ognesa homo sanien	O92012 mile musculu	p80982 thunnus obe		avena sa		Q273/3 trypanosoma	O8izk4 homo sapien	Q26825 trypanosoma	P82430 nicotiana t	O931e6 chlorotlexu	Q16350 nomo sapren O6idn2 canis famil	09g0e9 bacteriopha	Q47605 escherichia
Q9QVK8 Q16045 O10226 O10227	010228 010232 010233	Q661T4	Q55090	Q9SMC7	PCG6_PACGO	PCG7_PACGO	055069	09677724	090584	090504	CD4 SHEEP	DFTS RAT	EFTU_MYCSY	Q7S7 <u>I</u> 7	Q9TRB9	O9TRIO	Qencus	COECAS	Q541,13	107 400	088229	09R204	P82939	Q52435	Q616B1	VEMH BACSII	092G66	TPIS_BOMMO	Q7RJ <u>Y</u> 9	Q7ZBU6	PANI PANCA	VGJ BPG4	Q7 PGF4	QBMJG5	060839	Q71UF5	011890	011891	066MS0	exolog :	002830	2 Q98YR7	090038	COXO THIOB	090VE9	07M1G8	2 047601	2 027373	081284	2 026825	2 P82430	2 Q93LE6	2 Q16350	2 Q9G0E9	2 047605
110 144 122 222																																																							
18.0 18.0 18.0																																																							
2222																																								1.5		۲. در ا	1.5												
105 106 107 108	00,	- 0	<u>ი</u> ₹	15	17	18	19	0 5	7 0	3 6	2.0	7 2	26	27	28	29	30	131	132	133	134	136	137	138	139	140	141	143	144	145	146	14.	149	150	151	153	154	155	157	158	159	160	161	162	163	165	166	167	168	170	171	172	173	174	176

Length 25;

Q9E8S7

RESULT 1
098837
1D 098887
DT 01-M
DT 0

```
Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEDLINE=97255649; PubMed=9100996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Beet Local Similarity 62.55,
Conservative
                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                       Q8AQY0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 010481
                                                                                                                                                                   RESULT 3
QBAQYO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            010481
                                                 ઠે
                                                                                                                                                                                                                                                 ġ
                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=22860939; PubMed=14502005;
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Refel S.A., Shugars D.C.,
Refel S.A., Shugars D.C.,
Refel S.A., Sandars D.C.,
Refel S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=20411423; PubMed=10954550;
DOI=10.1128/JVI.74.18.8494-8501.2000;
Nelson J.A.E., Baribaud F., Edwards T., Swanstrom R.;
"Patterns of changes in human immunodeficiency virus type 1 V3 sequence populations late in infection.";
J. Virol. 74:8494-8501(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         53.3%; Score 65; DB 2; Length 23; 60.9%; Pred. No. 0.0019; tive 3; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23 AA; 2596 MW; 6C038F27BC0CA1E0 CRC64;
                                                                                                                                                                                           01-MAR-2001 (TrEMBLrel. 16, Last sequence update) 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                           Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
VCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus
                                                                                                                  23 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Mismatches
ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AFISS888; AAG0930.1; -. GO; GO:0019031; C:viral envelope; IEA. InterPro; IPR011056; Pept_S24_S26_C.
                                                                                                                                                                   01-MAR-2001 (TrEMBLrel. 16, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 NNTRRSMRI--GPGKAFYATGDI 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIQRGPGRAFVTIGKI 23
                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                               Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 60...
Local 14; Conservative
                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                      Name=env;
```

ò 셤 RESULT 2
0840X9
10 0840X9
10 0840X9
10 01-M
10

```
ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.

MEDLINE=22860939; PubMed=14502005;

MEDLINE=22860939; PubMed=14502005;

MEDLINE=22860939; PubMed=14502005;

Percel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,

Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;

Barrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;

"Envelope diversity, coreceptor usage and syncytium-inducing phenotype of HIV-1 variants in saliva and blood during primary infection.";

AIDS 17.2025-2033(2003).

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0019028; C:viral capsid; IEA.

GO; GO:0019031; C:viral envelope; IEA.

GO; GO:0019031; C:viral envelope; IEA.

GO; GO:0010777; GP120.
                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rencher S.D., Lockey T.D., Slobod K.S., Hurwitz J.L.;
Dulift from the GORARF HIV-1 envelope V3 crown sequence in a North
American inner city.";
AIDS Res. Hum. Retroviruses 13:527-528(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                   7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51.6%; Score 63; DB 2; Length 25; 62.5%; Pred. No. 0.0045; tive 1; Mismatches 6; Indels
                                                                                      6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 AA; 2749 MW; 9B6E9DACB8D56C0C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL, U81241; AAB53843.1; -. GO; GO:0016021; Cintegral to membrane; IEA. GO; GO:0019028; C:viral capsid; IEA. GO; GO:0019031; C:viral envelope; IEA. GO; GO:0019031; F:structural molecule activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
Best Local Similarity 62.5%; Pred. No. 0.0045; Matches 15; Conservative 1; Mismatcher
                                                                                                                                                                                                                                                                                                                                                                   25 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 AA.
                                                                                                                                                   1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                   2 NNTRRSINI--GPGRAFYATDIIG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
```

```
AIDS 17:2025-2033(2003)
                                                                                                      Envelope protein.
NON_TER 1
NON_TER 25
SEQUENCE 25 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q7ZJT3
                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D9QEX7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EXX COS CE DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
       RL
DR
DR
DR
KW
KW
FT
                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=22860939; PubMed=14502005;
Freel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Freel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J.,
Patrick E., Lennox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.;
Bravelope diversity, coreceptor usage and syncytium-inducing phenotype of HIV-1 variants in saliva and blood during primary infection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDILINE=22860939; PubMed=14502005; Freel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J., Patel S.A., Fiscus S.A., Pilcher C.D., Menezes P., Giner J., Patrick E., Lemnox J.L., Hicks C.B., Eron J.J. Jr., Shugars D.C.; Enrelope diversity, coreceptor usage and syncytium-inducing phenotype of HIV-1 variants in saliva and blood during primary infection."; AIDS 17:2025-2033(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                 Gaps
       InterPro; IPR000777; GP120.
InterPro; IPR011056; Pept_S24_S26_C.
Pfam; PF00516; GP120; 1.
AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
?
                                                                                                                                                                                                                                                               5;
                                                                                                                                                                                                       / Match 48.4%; Score 59; DB 2; Length 25; Local Similarity 66.7%; Pred. No. 0.021; nes 14; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 AA; 2601 MW; 71B5A774CE256C09 CRC64;
                                                                                                                                                     25 AA; 2801 MW; 25E1B150CD7C14B6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2003 (TrEMBLrel. 23, Last sequence update) 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 53; DB 2
Pred. No. 0.22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL, AF536912; AAN63927.1; -. GO; GO:0019031; C:viral envelope; IEA. InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 NNTRKGIHI - GPGGAFYGTDIIG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                 1 NNTRKSIRIORGPGRAFVTIG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                NNKRKGIHI -- GPGRAFYTKG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 58.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Envelope protein.
                                                                                                                           25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2003
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON TER
NON TER
SEQUENCE
                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                              NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08AQY2
                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
08AQY2
1D 08AQY
AC 08AQY
DT 01-MA
DT 01
                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QBAQY1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                  SPETTS
                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                   유
```

```
MEDITRE-IN103026; PubMed=11170057;

WEDITRE-IN103026; PubMed=11170057;

MEDITRE-IN103026; PubMed=11170057;

A. DOI=10.1002/1096-9071(200103)63:3<197::AID-JMV1000>3.3.CO;2-G;

Lin H.J., Siwak E.B., Lauder I.J., Hollinger F.B.;

Lin H.J., Siwak E.B., Lauder I.J., Hollinger F.B.;

T. Long-term culture of human immunodeficiency virus type 1 resulting in 10ss of glycosylation sites.";

T. Med. Virol. 63:197-202(2001).

E. BMBL; AR176663; ARF04369.1;

CO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0019028; C:viral capsid; IEA.

GO; GO:0019031; C:viral molecule activity; IEA.

INTERPO: IPR000777; GP120.

INTERPO: IPR000777; GP120.

INTERPO: IPR000777; GP120.

INTERPO: IPR000777; GP120.
                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00516; GP120; 1. -
AIDS; Coat protein; Envelope protein; Glycoprotein; Transmembrane.
                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

41.8%; Score 51; DB 2; Length 25;
Best Local Similarity 57.1%; Pred. No. 0.47;
Matches 12; Conservative 3; Mismatches 4; Indels
                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                       8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25 AA; 2818 MW; 9C6EBA908EB5ED47 CRC64;
                                                                                                                                       25 25
25 AA; 2601 MW; 71B5A774CE256C09 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NAY-2000 (TrEMBLrel. 13, Created) 01-NAY-2000 (TrEMBLrel. 13, Last sequence update) 01-UNA-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Namesenv;
Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                           / Match
Local Similarity 58.3%; Pred. No. 0.22;
les 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25 AA
EMBL, AF536911; AAN63926.1; -. GO; GO:0019031; C:viral envelope; IEA. InterPro; IPR000777; GP120.
                                                                                                                                                                                                                                                                                                                                                   1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                      2 NNTRKGIHI--GPGGAFYGTDIIG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIQRGPGRAFVTIG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ||||:|| : | |||: | |
|||||:|| : | |||: | | ||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
```

23

ö

Gaps

ö

4; Indels

NON TER

Length 23;

```
SEQUENCE FROM N.A.

MEDLINE-22975109; PubMed=14526110; DOI=10.1104/pp.103.027714;

Ayre B.G., Blair J.E., Turgeon R.;

Punctional and phylogenetic analyses of a conserved regulatory program in the phloem of minor veins.";

Plant Physiol. 133:1229-1239(2003).

EMBL; AY379782; AAQ74884.1;

GO; GO:0047216; F:transferse activity, transferring glycosyl. . .; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots, rosids, eurosids I, Cucurbitales, Cucurbitaceae, Sechium.
SEQUENCE FROM N.A.
MEDLINB=20411423; PubMed=10954550;
MEDLINB=20411423; PubMed=10954550;
DOI=10.1128/JVI.74.18.8494.8501.2000;
Nelson J.A.E., Baribaud F., Edwards T., Swanstrom R.;
"Patterns of changes in human immunodeficiency virus type 1 "sequence populations late in infection.";
J. Virol. 74:8494.8501(2000).
EMBL; AF092639; AAD04382.1; -...
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plasmodium yoelii yoelii.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium
                                                                                                                                                                                                       6108EAEC9C0CA947 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 AA; 2295 MW; A6673B5BFD06430C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2004 (TrEMBLrel. 26, Created)
1-MAR-2004 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 33; DB 2; I
Pred. No. 4.3e+02;
1; Mismatches 8;
                                                                                                                                                                                                                                   Score 38; DB 2;
Pred. No. 65;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence upd)
05-JUL-2004 (TrEMBLrel. 27, Last annotation upd)
Galactinol synthase (EC 2.4.1.123) (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                               22 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycosyltransférase; Transferase.
NON TER 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 TRKSIRIQRGPGRAFVT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TETAIESTDAPKRAFVT 22
                                                                                                                                                                                                                                      31.1%;
58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27.0%;
                                                                                                                                                                                       23 23
23 AA; 2460 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 47.1-
8; Conservative
                                                                                                                                                                                                                                                   Local Similarity 58.3
les 7; Conservative
                                                                                                                                                                                                                                                                                                  GPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                11 GPGKAFYATGDI 22
                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                     Envelope protein.
NON TER 1
NON TER 23
SEQUENCE 23 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=184140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=73239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sechium edule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=PY06991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=GAS1;
                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                            Q6U2M7
Q6U2M7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q7R974;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q7R974
                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                             Q6U2M7
   ò
                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                   6
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=95386957; PubMed=7658059;
Lawoko A., Johansson B., Dash R., Falck L., Dietrich U., Pipkorn R.,
Nilehn B., Blomberg J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Continuity and discontinuity in the anti-V3 IgG response of human immunodeficiency virus type 1-infected persons in a cross-sectional and longitudinal strudy using synthetic peptides.";
J. Infect. Dis. 172:682-60(1995).
SEQUENCE 18 AA; 2047 MW; F5884C2C32F15E55 CRC64;
                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
.
                                                                                                                                                                                                                                                                                                                            36.9%; Score 45; DB 2; Length 25; 50.0%; Pred. No. 4.7; trive 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32.0%; Score 39; DB 2; Length 18; 64.3%; Pred. No. 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                  25 25
25 AA; 2790 MW; CB4779D487E698D2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-2000 (TrEMBLrel. 13, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GP120 protein (Fragment).
Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                36.7%,
50.0%; Pres
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                             8 RIQRGPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                                                                                               |: |||| : | | |
1 RLSMGPGRVYYTTGPI 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel. 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 NNTRKSIRIORGPG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 NNTRK--RMTMGPG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 64.3
                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9PXF1;
01-MAY-2000
                                                                                                                                                                                                                                                                                NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=env;
                                                                                                                                                                                                                                                                                                                              Query Match
```

Q9PXF1

8

RESULT 9
OGPERIT
D OGPERIT

ö

Gaps

ö

8; Indels

Q9ENM9

ઠે g RESULT 10
OPENM9
AC Q9ENM
AC Q9ENM
DT 01-MAD
DT 01-MAD
DE NO1-MAD
DE NO-MAD

Length 22;

Created)

```
Bacteria; Firmicutes; Mollicutes; Entomoplasmatales;
                                                                                                                                                                   01-MAY-2000 (T-EMBLrel. 13, Last sequence update) 01-MAR-2001 (TrEMBLrel. 16, Last annotation update) L-lactate dehydrogenase homolog (Fragment).
                                                                                                                                                                                                                                                                                                       Spiroplasmataceae; Spiroplasma.
NCBI_TaxID=2134;
                                                                                                                                            01-MAY-2000 (TrEMBLrel. 13,
                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                   Spiroplasma melliferum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 RGPGRAF 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 RGPGGAW 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9UCK9
                                                                                             09R4L1
                                      RESULT 14
Q9R4L1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29UCK9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                         AC OCC OCC SERVING SO OCC SO O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                        Carucci D.J.;
"Genome sequence and comparative analysis of the model rodent malaria parasite Plasmodium yoelii yoelii.";
Nature 419:512-519(2002)
-!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                         Pubmed=12368865; DOI=10.1038/nature01099;
Pubmed=12368865; DOI=10.1038/nature01099;
Silva J.C., Emplaceva M.D., Allen J.B., Kochi T.W., Pertea M., Silva J.C., Emplaceva M.D., Allen J.B., Selengut J.D., Koo H.L., Peterson J.D., Pop M., Kosack D.S., Shumway M.F., Bidwell S.L., Shallom S.J., van Aken S.B., Riedmuller S.B., Feldblyum T.V., Cho J.K., Quackenbush J., Sedegah M., Shoaibi A., Cummings L.M., Plorens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A., Cunningham D.A., Periser P.R., Bergman L.W., Vaidya A.B., Van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R., Salzberg S.L., Venter J.C., Fraser C.M., Hoffman S.L., Gardner M.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

BEDLINES-2022999, PubMed=10555290;

Clark M.A., Moran N.A., Baumann P.;

Sequence evolution in bacterial endosymbionts having extreme base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Buchnera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOI. Biol. Evol. 16:1586-1598 (1999).

EMBL; AF110814; AAF13808.1; -.

EMBL; AF110814; AAF13808.1; -.

GO; GO:0005524; F:ATP binding; IEA.

GO; GO:0004003; F:ATP-dependent DNA helicase activity; IEA.

GO; GO:0004386; F:helicase activity; IEA.

GO; GO:00064386; F:helicase activity; IEA.

GO; GO:0006281; F:DAN repair; IEA.

InterPro; IPR000212; UvrD-helicase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 29; DB 2; Length 24; Pred. No. 2.2e+03; 3; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 29; DB 2; Length 20;
Pred. No. 1.8e+03;
3; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24 AA; 2515 MW; EA88246B840C4B75 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C583B1AD3B45C3FC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2003 (TEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATP-dependent DNA helicase (Fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   preliminary data.
EMBL; AABLO1002466; EAA19325.1; -.
Hypothetical protein.
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00580; UvrD-helicase; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 AA; 2461 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 41.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 41.7
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ::|| | |:
9 INMKRGTSRLFI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 NTRKSIRIQRGP 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7 IRIQRGPGRAFV 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Buchnera aphidicola.
[1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    compositions.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Helicase.
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
ò
```

| :|::| || 6 NOKKAVRCISGP 17

```
ö
                                                                                                                                                                                                                                                ö
[1]
SEQUENCE.

SEQUENCE.

MEDLINE=95331240; PubMed=7607178;
Cordwell S.J., Wilkins M.R., Cerpa-Poljak A., Gooley A.A., Duncan M., Williams K.L., Humphery-Smith I.;
Williams K.L., Humphery-Smith I.;
Electrophoreais 16:438-443(1995).

SEQUENCE 16 AA; 1749 MW<sub>1, F</sub>FF2078A15AE1647C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Baba S., Takahashi T., Kasama T., Shirasawa H.;
"Identification of two novel amyloid A protein subsets coexisting in an individual patient of AA-amyloidosis.";
Biochim. Biophys. Acta 1180:195-200 (1992).
PIR; A27902; YiHUA.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0006953; P:acute-phase response; IEA.
DinterPro; IPR000096; Serum_amyloid_A.
PF00277; SAA; 1.
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE.
MEDLINE=93099171; PubMed=1463770; DOI=10.1016/0925-4439(92)90068-X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Serum amyloid A isotype 2 alpha protein (Serum amyloid A protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 16;
                                                                                                                                                                                           Score 28; DB 2; Length 16; Pred. No. 2.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 27; DB 2; Length 16;
Pred. No. 3.1e+03;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1612 MW; 1CAB4F077C9C8CC1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 AA.
                                                                                                                                                                                                                                                3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Search completed: June 3, 2005, 03:20:35 Job time : 183 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                   23.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 22.1%;
Best Local Similarity 71.4%;
Matches 5; Conservative
                                                                                                                                                                         Query Match
Best Local Similarity 41...
Best Local Similarity 61...
                                                                                                                                                                                                                                                                                                   1 NNTRKSIRIQRG 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                  3 NSTRKVVLVGEG 14
```

ξ

```
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              384,
384,
                                                                                                                                                                                                                                                                                                            Sequence seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-973-551-24
US-08-67-392-27
US-08-257-528B-51
US-08-460-602A-51
US-08-460-602A-51
US-08-467-217A-51
US-08-467-312A-51
US-08-467-881A-51
US-08-467-881A-51
US-08-593-870A-31
US-09-593-870A-31
US-09-593-870A-31
US-09-593-870A-31
US-09-593-870A-31
US-08-09-593-870B-4
US-08-09-593-870B-4
US-08-015-770B-4
US-08-0105-488-384
US-08-0105-488-384
US-08-266-448-1

US-07-950-571A-1

US-08-537-245-1

US-08-537-245-1

US-08-637-245-1

US-08-637-245-1

US-08-472-503A-4

US-08-472-503A-4

US-08-473-745A-4

US-08-473-745A-4

US-08-470-419-25

US-08-470-9105-25

US-08-492-25

US-08-482-810-25

US-08-08-680-25

US-09-258-128-25

US-09-258-128-25

US-09-258-128-25

US-09-258-128-25

US-09-258-128-25

US-09-258-128-25

US-09-258-128-25

US-08-482-81

US-08-482-81

US-08-493-91

US-08-493-91

US-08-493-91

US-08-493-38-11

US-08-493-38-11

US-08-493-38-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-467-881A-35
PCT-US92-06688-13
US-08-657-392-28
US-08-251-472-2
US-08-484-905-35
US-08-481-985B-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-303-275-79
US-08-458-101-384
US-08-257-528B-16
US-08-460-602A-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-121-054C-3
US-08-539-436-3
US-09-813-659-3
US-09-549-067A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-370-476-35
US-08-992-877-15
PCT-US94-02539-28
       (08) 3/5018 12 100 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 100 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1, Appli
160, Appl
160, App
160, App
160, Appl
160, Appl
160, Appl
17, Appl
17, Appl
13, Appl
14, Appl
15, Appl
16, Appl
17, Appl
18, Appl
19, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                             June 3, 2005, 03:12:32; Search time 40 Seconds (without alignments) 44.789 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1
Sequence 6
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 218077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  áz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-097-751-1
US-08-090-148-6
US-08-08-148-6
US-08-148-6
US-08-148-6
US-08-148-6
US-08-148-160
US-08-123-425A-160
US-09-102-206-160
US-09-102-206-144
US-09-103-133-134
US-08-485-324-31
US-08-485-324-31
US-08-487-506-13
US-08-487-506-13
US-08-487-515-13
US-08-487-515-13
US-08-487-515-13
US-08-487-515-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum Match 0%
Maximum Match 100%
Listing first 250 summaries
                                                                                                                                                                                                                                                                               SEQ1
122
1 nntrksiriqrgpgrafvtigkig
                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                             Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62DX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing:
                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AU 111111111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regult
No.
```

6

Sequence 9, Appli Sequence 155, App Sequence 9, Appli Sequence 155, App	6	ii o	σ,	ດັດ	٠ d	, נכ א	7	א ע	20	21	σ	10	Š ,	7	5	20	2	6	10	Š.	2	11	13	1 1	1	9	18	5	7 :	7	13	L.	7 .	٩	18	22	1=	7 ,	13	4	ביי	91	18	2	:	1:	13	12	16	18	22	1	1	9	14	14	14	, ,	7 7	7	3	14	14	4		r,	ń	17		? ?	2:	2	2	22	7			,	٦,	25	0	Ţ
US-08-723-425A-9 US-08-723-425A-155 US-09-112-206-9 US-09-112-206-155	US-09-680-497-9	US-09-680-497-155 US-08-455-625-9	US-08-455-685-9	US-08-060-988A-9	PCT-US94-05142-9	PCT-US95-03236-29	PCT-US95-03236-52	US-08-455-625-19	US-08-455-625-20	112-08-455-625-21	11 000 400 011	00-100-400-00-00	US-08-455-685-20	US-08-455-685-21	US-08-060-988A-19	US-08-060-988A-20	11S-080-060-988A-21	DCT-11004 -05140-19	PCI-0844-08142-19	PCT-US94-05142-20	PCT-US94-05142-21	US-08-455-625-11	TIG-08-455-625-13	17 100 114 00 01	US-08-455-625-15	US-08-455-625-16	US-08-455-625-18	21 212 22 22	US-08-455-625-72	US-08-455-685-11	IIS-08-455-685-13	110 00 455 605 15	US-U8-455-685-IS	US-08-455-685-16	US-08-455-685-18	TIC-00-455-695-22	27 - COO - COO - COI	US-08-060-988A-11	TIS-08-060-988A-13	1 K K C C C C C C C C C C C C C C C C C	US-08-060-988A-15	US-08-060-988A-16	TIS-080-060-988A-18	CC - K000 - 070 - 071	US-U80-908-22	PCT-US94-05142-11	PCT-US94-05142-13	PCT-US94-05142-15	PCT-US94-05142-16	DCT-11S94-05142-18	DCT-11594-05142-22	110 00 01 00 01 10 01	FCT-WC70-9T7-90-50	US-08-306-116A-16	US-08-125-012-14	TIS-08-783-818-14	110 00 40 00 011	#1 OFC - 00 - 00 - 00	US-08-979-385B-12	US-08-880-576-14	US-08-513-968-73	US-08-455-625-14	118-08-455-685-14	AL 000 000 000 011	#1-4996-000-00-00	PCT-US94-05142-14	US-08-090-148-5	TIS-08-279-906A-17	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	US-08-455-625-IO	US-08-455-685-10	US-08-060-988A-10	PCT-US94-05142-10	US-08-345-321-22	TIS-09-790-497A-7	7 - W / C = - O C / - C O - O C O C C C C C C C C C C C C C	US-09-3/6-624A-7	US-US-190-49/A-9	US-09-576-824A-9	US-08-488-252-25	000000000000000000000000000000000000000	US-08-657-392-19
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3																																																																																		
8. 8. 8. 8. 8. 8. 8. 8.	59.8	8.60 C	59.0	59.0	29.0	59.0	59.0	59.0	59.0			٠ ١	59.0	29.0	59.0	59.0	0 0		0.60	29.0	59.0	2 8 2		7.0	58.2	58.2	5.8.2	9 6	58.2	58.2	2 8 2	9 6	58.5	58.2	28.7		7.0	58.2	C G C	9 0	58.2	58.2	c au	4 (	28.2	58.2	58.2	58.2	58.2	0		9 0	29.80	58.2	58.2	5 B 2		7.00	58.2	58.2	57.4	9.95	2 2 2 2		0.00	9.95	55.7	7 7 7		55.7	55.7	55.7	55.7	55.7			75.7	54.5	54.5	54.1	1.4.	54.1
73 73 73	73	57	72	72	72	72	72	72	72		1 6	7/	72	72	72	72		9 6	7/	72	72		1 :	7 /	71	71	7.1	- t	71	71	17		71	71	-		7 8	71	7.7	7 1	71	71	1	- 0	1/	71	71	71	71	17	1 -	7 ;	1/	71	71	7	۱,	7.	7.1	71	70	69	9	9 (	0	69	. 68	9	0 1	9	68	9	68	8	9 4	0 0		99			5 (	99
174 175 176	178	179	181	182	183	184	185	186	187	000	100	681	190	191	192	193	201	# L	195	196	197	861	000	Lys	200	201	200	202	203	204	200	000	206	207	800	0 0	802	210	116	117	212	213	100	# L 1	215	216	217	218	219	000	200	177	777	223	224	325	0.22	977	227	228	229	230	200	102	232	233	234	226	235	236	. 237	238	239	240		Z47	242	243	244	245	017	246
																																	_											_	_	_																																			-	_
	Appli	, Appli	Appli	, Appli	Appli	7, Appl	, Appli	Appli	بالمصلا	Applit	, Appli	, Appli	, Appli	Appli	Appli	Appli	וייולין י	3, Appl	8, Appl	2, Appl	5 4001	7, APP.4							b					ø	0	٧ (	N	4	٠.	ŋ	ù	ď	ì	•	ú		·Ľ		· L	1	- 1	'n	0	0	•		*	N	N	N	C	٠.	-		^	m	-		~	7	m	_	٠.	7	٠ (	N.	ഹ	ഹ	N	ı		
Sequence 26, Appl Sequence 2, Appli Sequence 17, Appl	. 7	7.	; ;	. '	,	27	7	H	ì	'n	٥	ģ	7,	2	_	ì -	7 .	2	28	22	2	,	÷ 1		7,	8	· -	ì	15	6	` -	ì	,	16	9 6	7 (	7.7	74	Ļ	,	15	,	} ,	:	12	7	·	7	. 14	;	-:	2	70	70	5	1 .	7	12	12	12	0	1	۲,	4	17	23	17	16	23	17	23	17	č	1 .	- 6	72	Sequence 155, App	15	12	10	o,	
Sequence 26, Sequence 2, Sequence 17,	Sequence 2,	Sequence 7,	Sequence 1,	Sequence 7,	Sequence 7,	Sequence 27	Seguence 2,	Semience 1.	Company 2	seduence 3,	sednence e,	Seguence 6,	Sequence 7,	Semience 2.	Semience 1	1 00000000	Sequence 17	Sequence 13	Sequence 28	Seguence 22	ac acreemen	Seducinos	'T edneuce T'	Sequence 7,	Sequence 7,	Semience 8.		'T ednence T'	Seguence 15	Semience 9.	C political of	'I ednence I'	Sequence 7,	Semience 16	or parients	z/ aorianbac	Sednence 72	Seguence 74		c/ ednence />	Segmence 15	St engines	CT PATIENTS	'/ eduence '/	Sequence 15	Seguence 7,	The Trainer	Semience 7	The Section 15		, sequence	Sequence 15	Sequence 70	Segmence 70	Segment 1	T opinonia o	Sednence 14	Sequence 12	Sequence 12	Segmence 12	פר פייתפיומפט		T/ Portantiac	sednence 4,	Sequence 17	Segmence 23	Seminar 17	t aniinhac	Sequence 23	Sequence 17	Sequence 23	Semience 17	Semience 23	- Sequence 23	/T aprindas	Sequence 72	Sequence 15	Sequence 15	Seguence 12	T SOUTH SOUT	Seguence 9,	11 0000.000
1 US-08-488-252-26 Sequence 26, 1 US-08-336-087-2 Sequence 2, 1 US-08-218-0258-17 Sequence 17, 1 US-08-36-07-37-1 Sequence 17, 1 US-08-36-07-37-2	1 US-08-709-0477 Sequence 7, 1 US-08-479-400-2	1 US-08-410-360-7 Sequence 7,	. 1 US-08-095-332-1 Sequence 1,	1 US-08-709-006-7 Sequence 7,	1 US-08-711-175-7 Sequence 7,	1 US-08-488-252-27 Sequence 27	2 US-08-021-879-2 Sequence 2,	2 IIS-07-760-530-1 Segmence 1.	- C 600000000000000000000000000000000000	2 US-0/-950-5/TA-3 sequence 5.	2 US-08-975-699-6 Sequence b,	; 2 US-08-972-089-6 Sequence 6,	5 2 US-08-455-625-7 Sequence 7,	3 119-08-395-204-2 Semience 2.	Semience 1 - 110 - 00 - 00 - 01 - 01 - 01 - 01	7 00-00-00-00-00-00-00-00-00-00-00-00-00-	7 OS-01-17-17-17-17-17-17-17-17-17-17-17-17-17	2 US-08-986-234-13 Sequence 13	5 2 US-08-986-234-28 Sequence 28	3 IIS-08-492-076-22 Seguence 22	2 - 110 00-100 00 00 00 00 00 00 00 00 00 00 00 00	3 US-US-493-U/1-23 Sequence 23	3 US-08-480-332-1 Sequence 1,	3 US-08-455-685-7 Seguence 7,	3 US-08-060-988A-7 Sequence 7,	2 TIC 10-051-006-8 Semience 8.	0 00-00-00-00-00-00-00-00-00-00-00-00-00	4 US-09-389-390-1 Sequence 1,	3 4 US-09-508-552-15 Sequence 15	9 - 110-00-071-688-9 Semience 9	7 03-03-03-03-03-03-03-03-03-03-03-03-03-0	5 5 PCT-US92-10378-1 Sequence 1,	5 5 pcT-US94-05142-7 Sequence 7,	1 118-08-218-025A-16 Semience 16	T OB-00-ZIO-0ZIW-IO	2/ = 0/1 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1/0 - 1	5 5 PCT-US94-02631-72 Sequence 72	3 11S-08-513-968-74 Sequence 74	1	3 3 US-08-513-968-75 Sequence />	4 TIS-09-790-497A-154 Segmence 15	7 110-00-676-924A-154	CT 2012-016-016-018-018-018-018-018-018-018-018-018-018	5 2 US-08-146-028-7	5 2 US-08-146-028-154 Sequence 15	3 11S-08-723-425A-7 Sequence 7,	15 domente 154 Semiente 15	2 TIS-00-112-206-7	15 SOUTH TO STATE OF THE SOUTH STATE OF THE	CT 2072-777-60-60 C	5 4 US-09-680-497-7	5 4 US-09-680-497-154 Sequence 15	5 1 US-08-704-170-70 Sequence 70	5 5 PCT-11894-02631-70 Segmence 70	2 110-00-4EF-60-19	21 020-00-31 020 21 00 00 00 00 00 00 00 00 00 00 00 00 00	5 3 US-08-930-917A-14 Sequence 14	5 3 US-08-455-685-12 Sequence 12	5 3 US-08-060-988A-12 Sequence 12	5 5 pcm-11894-05142-12 Sequence 12	0 0000000000000000000000000000000000000	1 00-00-10 T 000 T1 C 00-00-00 T1	3 3 US-08-013-966-11	4 1 US-08-090-148-4 sequence 4,	5 2 US-08-455-625-17 Sequence 17	5 2 US-08-455-625-23 Seguence 23	2 110_00_466_605_17 Semience 17	7 - 102-102-403-003-17 / 103-103-103-103-103-103-103-103-103-103-	5 3 US-08-455-685-23 Sequence 23	5 3 US-08-060-988A-17 Sequence 17	5 3 US-08-060-988A-23 Sequence 23	5 5 pcm_11894_05142_17 Sequence 17	0 0 FOL-0004-00142-17 Codecinco 17	5 5 FCI-0594-05142-25 , Sequence 23	Z Z US-08-345-321-I/ Sequence I/	3 3 US-08-513-968-72 Sequence 72	3 4 US-09-790-497A-155 Sequence 15	3 4 US-09-576-824A-155 Sequence 15	4 2 HS-08-345-321-12 Sequence 12	24	5 2 US-08-146-028-9 Sequence 9,	
US-08-488-252-26 Sequence 26, US-08-336-087-2 Sequence 2, US-08-218-0258-17 Sequence 17, US-08-218-0258-17 Sequence 17, US-08-708-047-7	1.1 IS 1 US-08-709-047-7 Sequence 7,	1.1 15 1 US-08-410-360-7 Sequence 7,	1.1 15 1 US-08-035-332-1 Sequence 1,	1 15 1 US-08-709-006-7 Sequence 7,	1 15 1 US-08-711-175-7 Sequence 7,	1.1 15 1 US-08-488-252-27 Sequence 27	11 15 2 US-08-021-879-2 Sequence 2,	1 15 2 IIS-07-760-530-1 Segmence 1.	TO CONTRACT OF THE CONTRACT OF	15 2 US-0/-950-5/1A-3 Sequence 3/	1.1 15 2 US-08-975-699-6 Sequence 5,	1.1 15 2 US-08-972-089-6 Sequence 6,	1.1 15 2 US-08-455-625-7 Sequence 7,	1 15 2 HS-08-395-204-2 Semience 2.	Semience 1	7+ 00000000	T STIPPING T-WILL TO Z STI T.	1.1 15 2 US-08-986-234-13 Sequence 13	3.1 15 2 US-08-986-234-28 Sequence 28	1 15 3 IIS-08-492-076-22 Sequence 22	A CONTRACTOR OF THE CONTRACTOR	1.1 L5 3 US-US-#93-U/L*25 Sequente 20	3.1 15 3 US-08-480-332-1 Sequence 1,	3.1 15 3 US-08-455-685-7 Sequence 7,	11 15 3 US-08-060-988A-7 Sequence 7,	1 1 2 TIC-00-051-006-8		3.1 15 4 US-09-389-390-1 Sequence L,	3.1 15 4 US-09-508-552-15 Sequence 15	Semience 9	1.0 00000000000000000000000000000000000	3.1 15 5 PCT-US92-10378-1 Sequence 1,	3.1 15 5 PCT-US94-05142-7 Sequence 7,	2 3 15 1 IIS-08-218-025A-16 Segmente 16	or company of the control of the con	2.3 15 1 0S-08-704-170-72 Sequence 72	2.3 15 5 PCT-US94-02631-72 Sequence 72	5 3 11S-08-513-968-74 Sequence 74	12 000 011 000 01 00 00 00 00 00 00 00 00	2.3 23 3 US-08-513-968-75 sequence 75	2 2 2 4 TIS-09-790-497A-154 Sequence 15	TO COLOR TO	12 TOTAL TOT	2.3 25 2 US-08-146-028-7 sequence /,	2,3 25 2 US-08-146-028-154 Sequence 15	2 3 25 3 HS-08-723-425A-7 Sequence 7,	Seminance 15	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A CONTRACT AND CALL OF THE CONTRACT OF THE CON	CT CONTINUE TO THE TOTAL	2.3 25 4 US-09-680-497-7	2.3 25 4 US-09-680-497-154 Sequence 15	1.5 15 1 US-08-704-170-70 Sequence 70	1 E 1 E DCT-11S94-02631-70 Sequence 70	TICLUST CONTRACTOR SECTION SECTION 1		0.7 15 3 US-08-930-917A-14 sequence 14	0.7 15 3 US-08-455-685-12 Sequence 12	0.7 15 3 US-08-060-988A-12 Sequence 12	0 7 15 5 PCT-11894-05142-12 Sequence 12	Of account to the contract of		0.7 23 3 US-08-513-908-71	9.8 14 1 US-08-090-148-4 sequence 4,	9.8 15 2 US-08-455-625-17 Sequence 17	a B 15 2 US-08-455-625-23 Sequence 23	17 Seminance 17 Seminance 17	11 S	9.8 15 3 US-08-455-685-23 Sequence 23	9.8 15 3 US-08-060-988A-17 Sequence 17	9 8 15 3 US-08-060-988A-23 Sequence 23	0 0 15 5 DCT-11994-05142-17 Sequence 17	9.8 ID 0 FCI-0534-05142-1/ 064466166 1/	9.8 IS PULL-US94-US142-23 , Sequence 23	9.8 22 2 US-08-345-321-1/ Sequence 1/	9.8 23 3 US-08-513-968-72 Sequence 72	9.8 23 4 US-09-790-497A-155 Sequence 15	9.8 23 4 US-09-576-824A-155 Seguence 15	9 8 24 2 HS-08-345-321-12 Seguence 12	21 2 02 00 - 02 - 03 - 03 - 03 - 03 - 03 -	9.8 25 2 US-08-146-028-9 Sequence 9,	
9 20 1 US-08-488-252-26 Sequence 26, 1 15 1 US-08-336-087-2 Sequence 2, 1 15 1 US-08-218-0258-17 Sequence 17, 1 15 1 US-08-218-0258-17 Sequence 17,	63.1 IS 1 US-08-709-04/*/ Sequence 7, 63.1 15 1 US-08-479-400-2	63.1 15 1 US-08-410-360-7 Sequence 7,	63.1 15 1 US-08-035-33Z-1 Sequence 1, 63.1 15 1 US-08-707-8018-7 Sequence 7.	63.1 15 1 US-08-709-006-7 Sequence 7,	63.1 15 1 US-08-711-175-7 Sequence 7,	63.1 15 1 US-08-488-252-27 Sequence 27	63.1 15 2 US-08-021-879-2 Sequence 2,	63 1 15 2 IIS-07-760-530-1 Sequence 1.	C COCCOCION OF THE COCC	63.1 15 2 US-0/-950-5/1A-3 sequence 3/	63.1 15 2 US-08-975-699-6 Sequence 6,	63.1 15 2 US-08-972-089-6 Sequence 6,	63.1 15 2 US-08-455-625-7 Sequence 7,	62 1 15 2 TIS-08-395-204-2 Semience 2.	Semiente 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	7+ 10102200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	63.1 I.S. 2 US-0/-841/-311A-1 Sequence 1.	63.1 15 2 US-08-986-234-13 Sequence 13.	63.1 15 2 US-08-986-234-28 Sequence 28	63 1 15 3 IIS-08-492-076-22 Sequence 22	AC ASSESSED TO CONTRACT TO CON	15 3 002-01-14-00 C2-11-15 C2-14-10-15-14-15-15-15-15-15-15-15-15-15-15-15-15-15-	63.1 15 3 US-08-480-33Z-1 Sequence 1,	63.1 15 3 US-08-455-685-7 Sequence 7,	63.1 15 3 US-08-060-988A-7 Sequence 7,	23 1 1 2 112-09-051-006-8 Semience 8	10 000 00 00 00 00 00 00 00 00 00 00 00	63.1 15 4 US-09-389-390-1 Sequence L,	63.1 15 4 US-09-508-552-15 Sequence 15	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	63.1 15 5 PCT-US92-103/8-1 Sequence 1,	63.1 15 5 PCT-US94-05142-7 Sequence 7,	62 3 15 1 11S-08-218-025A-16 Semience 16	ST.	62.3 15 1 US-U8-7/U4-1/U-7/2 Sequence 7/2	62.3 15 5 PCT-US94-02631-72 Sequence 72	62 3 23 3 118-08-513-968-74 Sequence 74	10 10 10 10 10 10 10 10 10 10 10 10 10 1	62.3 23 3 US-08-513-968-75 Sequence 75	62 3 23 4 TR-09-790-497A-154 Segmence 15	15 1 110 00 100 100 100 100 100 100 100	12.33 2.3 4 03-03-03-03-03-03-03-03-03-03-03-03-03-0	62.3 25 2 US-08-146-028-7 Sequence /,	62.3 25 2 US-08-146-028-154 Sequence 15	62 3 25 3 IIS-08-723-425A-7 Segmence 7.	Seminance 15	2. 1 00 00 12 12 12 12 12 12 12 12 12 12 12 12 12	A CONTRACTOR CONTRACTOR OF THE	22 3 US-US-III- COOL III-	62.3 25 4 US-09-680-497-7 Sequence 7,	62.3 25 4 US-09-680-497-154 Sequence 15	61.5 15 1 US-08-704-170-70 Sequence 70	61 5 15 5 DCT-11894-02631-70 Sequence 70	110 110 110 110 110 110 110 110 110 110		60.7 15 3 US-08-930-917A-14 Sequence 14	60.7 15 3 US-08-455-685-12 Sequence 12	60.7 15 3 US-08-060-988A-12 Sequence 12	60 7 15 5 PCT-IIS94-05142-12 Sequence 12	01 average 00 000 11 1 00 000 100 100 100 100 100	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	60.7 23 3 US-08-513-988-71	59.8 14 1 US-08-090-148-4 sequence 4,	59.8 15 2 US-08-455-625-17 Sequence 17	59 R 15 2 US-08-455-625-23 Seguence 23	17 Semiente 17 Semiente 17 Semiente 17	12 3 US-08-433-083-11 8:85	59.8 15 3 US-08-455-685-23 Sequence 23	59.8 15 3 US-08-060-988A-17 Seguence 17	59.8 15.3 US-08-060-988A-23 Sequence 23	60 0 15 5 DCT-11804-05142-17 Section 17	19 9 FC1-0534-05142-17 C4444444 19 10 10 10 10 10 10 10 10 10 10 10 10 10	29.8 IS PCLLOSSE SEGUENTS SEGU	59.8 22 2 US-08-345-371-1/ Sequence 1/	59.8 23 3 US-08-513-968-72 Sequence 72	59.8 23 4 US-09-790-497A-155 Sequence 15	59.8 23 4 US-09-576-824A-155 Sequence 15	59 8 24 2 HS-08-345-321-12 Segmence 12	24 2 03-04-04-04-04-04-04-04-04-04-04-04-04-04-	59.8 25 2 US-08-146-028-9 Sequence 9,	

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
  Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                   APPLICANT: DeRossi, Anita
APPLICANT: Pasti, Marcella
APPLICANT: Pasti, Marcella
APPLICANT: Panozzo, Marina
APPLICANT: Panozzo, Marina
APPLICANT: Dettin, Monica
APPLICANT: Chieco-Bianchi, Luigi
APPLICANT: Chieco-Bianchi, Luigi
TITLE OF INVENTION: METHOD FOR THE DIAGNOSIS IN VITRO OF
TITLE OF INVENTION: HIV-1 VIRUS INFECTIONS
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hedman, Gibson, Costigan & Hoare
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
CUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 122; DB 1; Length 24; 100.0%; Pred. No. 1.1e-11; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage COMPUTER: IBM PS/2
COMPUTER: IBM PS/2
OPERATING SYSTEM: DOS
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/097,751
FILING DATE: 199%0723
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: SPLICATION NUMBER: COSTITUTION NUMBER: NAME: COSTITUTION NUMBER: ATTORNEY/AGENT INFORMATION:
NAME: COSTIGUTION NUMBER: 25,669
REGISTRATION NUMBER: 25,669
REGISTRATION NUMBER: 515-4026
RELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
US-08-657-392-20
US-08-657-392-21
US-08-657-392-23
PCT-US94-02539-19
                                                                                                                            ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Mastico, Robert Allan
APPLICANT: Stockley, Peter George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/08090148
Patent No. 5534257
GENERAL INFORMATION:
APPLICANT: Mastico, Robert Allan
                                                                                                                                                                                                                          Sequence 1, Application US/08097751
Patent No. 527766
GENERAL INFORMATION:
APPLICANT: DeRossi, Anita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (212) 302-8998
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.
Best Local Similarity 100.
Matches 24; Conservative
  2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-090-148-6
                                                                                                                                                                                                             US-08-097-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-097-751-1
  99
  247
248
249
250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES, PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROCESS FOR THE DETERMINATION OF PEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 100.0%; Score 122; DB 1; Length 24; Best Local Similarity 100.0%; Pred. No. 1.1e-11; Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC_Compatible
COMPUTER: COMPATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/146,028
INFORMATION FOR SEQ ID NO: 160:
SEQUENCE CHARACTERISTICS:
                          Antigen-Presenting Capsid with
Fusion MS2-Coat Protein
                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM P52-486
COMPUTER: IBM P52-486
COMPATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: ('95/08/090,148
FILING DATE: 08/11/93/
CLASSIFFCATION: 435
RELOR APPLICATION NUMBER: (GB 9101550.3)
FILING DATE: 01/24/93/
APPLICATION NUMBER: PCT/GB92/00124
FILING DATE: 01/22/92
ATTORNEY/AGENT INFORMATION:
NUMBE: NISSENT INFORMATION:
NUMBE: NISSENT INFORMATION:
NUMBE: NISSENT INFORMATION:
                                                                                                                                                                                                        STATE: NY
COUNTRY: U.S.A.
ZIP: 10022-2585
COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette, 3.5", 1.44Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-146-028-160
; Sequence 160, Application US/08146028
; Patent No. 5891640
; GENERAL INFORMATION:
APPLICANT: Talbot, Simon John
TITLE OF INVENTION: Antigen-Pret
TITLE OF INVENTION: Fusion MS2-(
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rosenman & Colin
STREET: 575 Madison Avenue
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 27,582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 940-8636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (212) 940-6404
INFORMATION FOR SEQ ID NO: (
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: PROC
TITLE OF INVENTION: IN A
TITLE OF INVENTION: PROF
TITLE OF INVENTION: PROC
TITLE OF INVENTION: PROC
NUMBER OF SEQUENCES: 453
COMPUTER REALABLE FORM:
MEDIUM TYPE: Ploppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGINAL SOURCE
                                                                                                                                                                                    94306
                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-112-206-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-480-332-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                           PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING TO IMMUOLGGICALLY IMPORTANT BEITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/08480332;
Patent No. 6180134;
GENERAL INFORMATION:
APPLICANT: Zalipsky, Samuel; Woodle, Martin; Martin, Francis;
APPLICANT: Barenholz, Yechezkel;
TITLE OF INVENTION: Enhanced Circulation Effector Composition and
                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                            Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 122; DB 3; Length 24; 100.0%; Pred. No. 1.1e-11;
                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 22201
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                          100.0%; Score 122; DB 2; 100.0%; Pred. No. 1.1e-11;
                                                                                                                                                                                                                                                                                     RESULT 4

US-08-723-425A-160

Sequence 160, Application US/08723425A

Patent No. 6165730

GENERAL INFORMATION:
APPLICANT: DELEYS, ROBERT

TITLE OF INVENTION: PROCESS FOR THE DETERMINA:
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO
TITLE OF INVENTION: PEPTIDES CORRESPONDING TO
TITLE OF INVENTION: PEPTIDES OR HERIN USE IN
TITLE OF INVENTION: APPLIEDES OR BIOTINYLATES

UNMBER OF SEQUENCES: 453

CORRESPONDENCE ADDRESS:
ADDRESSES: NIXON & VANDERHYE, P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAPLICATION NUMBER: US/08/723,425A FILING DATE: CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.J.
REGISTRATION NUMBER: 1487-13
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4000
                                                                                                                                                                                                                         1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                  1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 703-816-4100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 24 amino acids
                                                                                                                                      24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24; Conservative
                         ; MOLECULE TYPE: peptide US-08-146-028-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide
TOPOLOGY: linear
                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-723-425A-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-08-480-332-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                      Matches
```

```
PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINVLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES, PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.25 (EPO)
                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,332
FILING DATE: 7-UDN:1995
CLASSIFICATION NUMBER: US/08/480,332
FILING DATE: 7-UDN:1995
CLASSIFICATION NUMBER: US/08/316,436
FILING DATE: 29-SEP-1994
PRIOR APPLICATION NUMBER: US/08/316,443
FILING DATE: 29-SEP-1994
APPLICATION NUMBER: US/08/035,443
ATTORNEY/AGENT INFORMATION:
NAME: MOHT. JUMP NUMBER: S3.563
REGISTRANCE/DOCKET NUMBER: 53.25-0115.31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 122; .DB 3; Best Local Similarity 100.0%; Pred. No. 1.1e-11; Matches 24; Conservative 0; Mismatches 0;
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INDIVIDUAL ISOLATE: Peptide 2, Fig. 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 160, Application US/09112206
Patent No. 6210903
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3: Floppy disk
IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 53
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                    Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 24 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS: unknown unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: PROC
TITLE OF INVENTION: IN P
TITLE OF INVENTION: PEPT
TITLE OF INVENTION: PROC
MUMBER OF SEQUENCES: 453
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: unl
```

```
TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
TITLE OF INVENTION: BIOTINIATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
FILE REFERENCE: 2722-16
CURRENT APPLICATION NUMBER: US/09/790,497A
CURRENT PILING DATE: 2001-02-23
PRIOR PELING DATE: 2001-02-3
PRIOR APPLICATION NUMBER: 08/723,425
PRIOR APPLICATION NUMBER: 09/746,028
PRIOR APPLICATION NUMBER: 09/146,028
PRIOR FILING DATE: 1993-11-22
PRIOR FILING DATE: 1993-11-22
PRIOR APPLICATION NUMBER: EP 92400598.6
PRIOR FILING DATE: 1992-03-06
PRIOR PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROBERT

PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING

TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN

A PROCESS FOR DETERMINATION OF ANTIBODIES OF

BOTINVALATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT

EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS

CONTAINING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 122; DB 4; Length 24;
Pred. No. 1.1e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 122; DB 4;
Pred. No. 1.1e-11;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: PROCESS FOR THE DETERMINATION: PROCESS FOR THE DETERMINATION: PROCESS FOR THE DETERMINATION: TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTY TITLE OF INVENTION: A PROCESS FOR DETERMINATION: TITLE OF INVENTION: BIOTINYLATED PEPTIDES CONTITLE OF INVENTION: BIOTINYLATED PEPTIDES CONTITLE OF INVENTION: CONTAINING THEM FILTE OF INVENTION: CONTAINING THEM FILLE REFERENCE: 2752-11

CURRENT APPLICATION NUMBER: U8/09/576,824A

CURRENT APPLICATION NUMBER: 08/723,425

PRIOR FILING DATE: 1996-09-30

PRIOR FILING DATE: 1993-11-22

PRIOR PELICATION NUMBER: EP 92400598.6

PRIOR APPLICATION NUMBER: EP 92400598.6

PRIOR APPLICATION NUMBER: EP 92400598.6

PRIOR PRILING DATE: 1992-03-08

NUMBER: OF SEQ ID NOS: 600

SEQ ID NO 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 160, Application US/09576824A Patent No. 6667387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
100.0%;
Best Local Similarity 100.0%;
Matches 24; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query March
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-790-497A-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-576-824A-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robert
PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
TO IMMUNOLOGICALLY IMPORTANT EPITODES AND THEIR USE IN
A PROCESS FOR DETERMINATION OF ANTIBODIES OF
BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
EPITODES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
CONTAINING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: De Leys, Robert
TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 122; DB 4; Length 24; larity 100.0%; Pred. No. 1.1e-11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 122; DB 3;
Pred. No. 1.1e-11;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: PROCESS FOR THE DETERMINAT TITLE OF INVENTION: PROCESS FOR THE DETERMINAT TITLE OF INVENTION: PROCESS FOR THE DETERMINAT TITLE OF INVENTION: A PROCESS FOR DETERMINATION: DETERMINATION: BIOTINVILATED PEPTIDES CORTITLE OF INVENTION: BIOTINVILATED PEPTIDES CORTITLE OF INVENTION: EPITOPES, A PROCESS FOR FILTLE OF INVENTION: CONTAINING THEM FILE OF INVENTION: CONTAINING THEM FILE OF INVENTION CONTAINING THEM FILE OF INVENTION NUMBER: 09/576,824 PRIOR APPLICATION NUMBER: 09/723,425 PRIOR PELICATION NUMBER: 09/146,028 PRIOR FILING DATE: 1996-09-30 PRIOR APPLICATION NUMBER: 09/146,028 PRIOR APPLICATION NUMBER: 09/146,028 PRIOR APPLICATION NUMBER: PRIOR PLING DATE: 1993-03-06 PRIOR FILING DATE: 1993-03-06 PRIOR FILING DATE: 1993-03-06 PRIOR FILING DATE: 1993-03-06 PRIOR FILING DATE: 1992-03-06 NUMBER: PATOR PRIOR FILING DATE: 1992-03-06 NUMBER: PATOR PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Human immunodeficiency virus
                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/112,206
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/146,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 160, Application US/09790497A Patent No. 6649735 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-790-497A-14; Sequence 14, Application US/09790497A; Sequence 10. 649735; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 amino acida
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-112-206-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-790-497A-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-790-497A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

ö

```
Sequence 3, Application PC/TUS9210378
| Sequence 3, Application PC/TUS9210378
| GENERAL INFORMATION:
| APPLICANT: BOARD OF REGENTS, THE UNIVERSITY OF
| APPLICANT: TEXAS SYSTEM |
| APPLICANT: ALINGHAUS, Ralph B. |
| APPLICANT: ALINGHAUS, Ralph B. |
| APPLICANT: NEHERS: Pramod N. |
| APPLICANT: NEHERS: Pramod N. |
| TITLE OF INVENTION: FOR ELICITING IMMUNE OR ANTI-INFECTIVE RESPONSES |
| NUMBER OF SEQUENCES: 7 |
| CORRESPONDENCE ADDRESS: ADDRESS: ADDRESSE: ANDIA, White & Durkee |
| STREET: P.O. BOX 4433
                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                            Length 24;
                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 122; DB 5;
Best Local Similarity 100.0%; Pred. No. 1.1e-11;
Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 19921202
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/945865
FILING DATE: September 16, 1992
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 32,165
REFERENCE/DOCKET NUMBER: 32,165
REFERENCE/DOCKET NUMBER: 32,165
REFERENCE/DOCKET NUMBER: 32,165
REFERENCE/DOCKET NUMBER: 32,165
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: 512-320-7200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/10378
FILING DATE: 19921202
                                00231/052WO1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 NNTRKSIRIORGPGRAFVTIGKIG 24
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEFAX: (617) 542-8906
                                                                                                                                                                12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: Not Applicable INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 24 amino acids TYPE: AMINO ACID
                                                                                                                                     TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                    TYPE: AMINO ACID TOPOLOGY: linear PCT-US92-06688-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Texas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: US
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US92-10378-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCT-US92-10378-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
CITY: Ho
                                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ે
                                                                                                                                                                                                         PROCESS FOR THE DETERMINATION OF PEPTIDES
CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
IN A PROCESS FOR DETERMINATION OF ANTHRODIES OR BIOTINVILATED
PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: REPLICANT
APPLICANT: REPLICANT: REPLICANT
APPLICANT: THE ROCKEFELLER UNIVERSITY
TITLE OF INVENTION: WALTIPLE ANTIGEN PEPTIDES FOR USE AS HIV
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 24;
                                                                                                                                                                                                                 TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTITITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANITITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITUTION: PROCESS FOR PREPARING THEM AND COMPOSINUMBER OF SEQUENCES: 453
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC COMPATABLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATH:
APPLICATION NUMBER: US/09/680,497
FILING DATE: O6-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
COMPUTER: IBM PS/2 MODEL 50Z
ATTORNEY/AGENT: INFORMATION: 424
PRICK DATE: 13 AUGUSE 1992
ATTORNEY/AGENT: INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0%; Pred. No. 1.1e-11;
Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 06-OCT-2000
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/146,028
FILING DATE: 22-NOV-1993
INFORMATION FOR SEQ ID NO: 160:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 12, Application PC/TUS9206688 GENERAL INFORMATION:
                                                                                                            ; Sequence 160, Application US/09680497; Patent No. 6709828; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 24 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Paul T. Clark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCT-US92-06688-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-680-497-160
                                                                    RESULT 10
US-09-680-497-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
```

ઠ g

```
ADDRESSEE: Curtis, Morris, & Safford
                     1: c/o Barry Evans
530 Fifth Avenue
                                                                             New York
                                                        CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                               10036
                  ADDRESSEE:
                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-485-324-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                        ö
                                                          Gaps
                                                        ö
                  Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%; Score 122; DB 3; Length 25; I Similarity 100.0%; Pred. No. 1.2e-11; 24; Conservative 0; Mismatches 0: Indels
                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNIA..

ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
^^FTWARE: PatentIn Release #1.0, Version #1.25
-^*TTON DATA:
              Query Match 100.0%; Score 122; DB 5; Best Local Similarity 100.0%; Pred. No. 1.1e-11; Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Curtis, Morris, & Safford ADDRESSEE: c/o Barry Evans STREET: 530 Fifth Avenue CITY: New York STATE: New York COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,324
FILING DATE: 07-UN-1995
CLASSIFICATION UNMBER: US 08/235,437
APPLICATION UNMBER: US 08/235,437
FILING DATE: 29-APR-1994
APPLICATION NUMBER: US 07/852,412
FILING DATE: 16-MAR-1992
ATTORNEY AGENT INFORMATION:
NAME: EVANB, BATY
REGISTATION NUMBER: 22,802
REFERENCE/DOCKET NUMBER: 370132-2000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 840-3333
TELECOMMUNICATION SEQ. 10 NO: 13:
SEQUENCE: (212) 840-313:
SEQUENCE: CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         370132-2000
                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Wohlstadter, Jacob
TITLE OF INVENTION: SELECTION METHODS
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 31, Application US/08485324
Patent No. 6043093
GENERAL INFORMATION:
APPLICANT: Wohlstadter, Jacob
TITLE OF INVENTION: SELECTION METHODS
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
                                                                                                                       1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                            1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                             RESULT 13
US-08-485-324-13
, Sequence 13, Application US/08485324
, Patent No. 604303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 24; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
US-08-485-324-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-485-324-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                              ò
                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
            COMPUTER KEADABLE FORM:
MEDIUW TYPE: FIDPOPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,324
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 08/235,437
APPLICATION NUMBER: US 08/235,437
FILING DATE: 16-MR-1994
APPLICATION NUMBER: US 07/852,412
FILING DATE: 16-MR-1997
ATTORNEY/AGENT INFORMATION:
NAME: Evans, Barry
REGISTRATION NUMBER: 22,802
REFERENCE/DOCKET NUMBER: 370132-2000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 809-3333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 122; DB 3; Best Local Similarity 100.0%; Pred. No. 1.2e-11; Matches 24; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-447-506-13
Sequence 13, Application US/08447506
Patent No. 6066499
GENERAL INPORMATION:
APPLICANT: Wohlstadter, Jacob
TITLE OF INVENTION: SELECTION METHODS
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: Curtis, Woris, & Safford
ADDRESSEE: C/O Barry Evans
STREET: 530 Fifth Avenue
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/235,437
FILING DATE: 29-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/447,506
FILING DATE: 23-MXY-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (212) 840-0712
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 122; DB 3; Length 25; Best Local Similarity 100.0%; Pred. No. 1.2e-11; Matches 24; Conservative 0; Mismatches 0; Indels
## APPLICATION NUMBER: US 07/852,412
FILING DATE: 16-MAR-1992
| ATTORNEY/AGENT INFORMATION:
| NAME: Evans, Barry | REGISTRATION NUMBER: 22,802 |
| REFERENCE/DOCKET NUMBER: 370132-2000 |
| TELECOMMUNICATION INFORMATION: | TELECOMMUNICATION INFORMATION: | TELECOMMUNICATION INFORMATION: | SEQUENCE CHARACTERISTICS: | LENGTH: 25 amino acids | STRANDEDNESS: single | STRANDEDNESS: single | US-08-447-506-13
                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
```

Search completed: June 3, 2005, 03:21:57 Job time: 44 secs

7

10

```
sequence 1, Appli
Sequence 1, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 24, Appli
Sequence 115, Appli
Sequence 115, Appli
Sequence 116, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 12, Appli
Sequence 13, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 13, Appli
Sequence 11, Appli
Sequence 12, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 14, Appli
Sequence 15, Appli
Sequence 16, Appli
Sequence 16, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 50, Appl
Sequence 5, Appli
Sequence 109, App
Sequence 109, App
                                                                                                                                                                                                                                                              Appl
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, 1
Sequence 12,
Sequence 51,
Sequence 68,
                                         Sequence
Sequence
Sequence
Sequence
                                                                                                                                     Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                  Sequence Sequence Sequence Sequence Sequence
                                                                                               Sequence
                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
| US-09-827-688-9
| US-09-077-49A-3
| US-09-077-49A-3
| US-10-133-210-246
| US-10-133-210-262
| US-10-133-210-262
| US-10-137-890-2
| US-10-137-890-2
| US-10-137-890-2
| US-10-137-890-1134
| US-10-239-313A-136
| US-10-373-592-116
| US-10-373-50
     \frac{1}{2}
    4466.
4466.
465.
465.
                                                                                                                                                                                                                                                65
65
65
65
65
65
                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                   66.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Appli
Sequence 3, Appli
Sequence 24, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 45, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 160, App
Sequence 13, Appl
Sequence 31, Appl
                                                                                           June 3, 2005, 03:15:13; Search time 137 Seconds (without alignments) 60.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       results predicted by chance to have a . to the score of the result being printed, of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15, P
Sequence 24, P
Sequence 8, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications Asia.

| cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO6_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO6_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO9_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO9_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO9_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO9_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_PUBCOMB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.ppp:*
| cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.ppp:*
                                                                                                                                                                                                                                                                           330134
               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-621-675-160
US-10-876-343A-13
US-10-876-343A-31
US-10-876-343A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-178-488-25
US-09-813-659-3
US-10-283-610A-3
US-09-827-345-24
US-10-311-11-1
US-10-318-932-1
US-10-62-710-45
US-09-810-310-15
US-09-810-310-24
US-09-989-621-8
                                                                                                                                                                                                                                                                       hits satisfying chosen parameters:
                                                                                                                                                                                                                                               1465611 segs, 345679903 residues
                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 250 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                   Published_Applications_AA:*
                                                                    protein search, using sw model
                                                                                                                                                 SEQ1
122
1 nntrksiriqrgpgrafvtigkig
                                                                                                                                                                                                                    Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of ressecore greater than or equal to and is derived by analysis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110
110
110
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match Length
                                                                                                                                                                                                        BLOSUM62DX
                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82.8
81.1
81.1
77.9
77.9
67.2
63.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14:
                                                                                                                                                                                                                                                                          Total number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
99
97
95
95
77
77
                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                    OM protein
                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
11
11
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

Sequence 118, App Sequence 25, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 37, Appl Sequence 37, Appl Sequence 50, Appl Sequence 50, Appl Sequence 51, Appl Sequence 4377, App Sequence 4377, App Sequence 4377, App Sequence 4377, App Sequence 4377, Appl Sequence 4377, Appl Sequence 4377, Appl Sequence 13, Appl Sequence 16, Appl Sequence 16, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 11, Appl Sequence 12, Appl Se	018118414877 48460800088000880771 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
3 15 US-10-1773-592-118 5 9 US-09-775-805-50 5 9 US-09-775-805-50 5 10 US-09-964-2014-2 5 110 US-09-964-2014-2 5 12 US-09-10-41-414-39 5 15 US-10-041-414-39 5 15 US-10-041-388-2 5 16 US-10-681-388-2 6 14 US-10-682-003-5 6 14 US-10-682-003-7 7 US-10-684-200-89 7 US-10-149-1138-4377 7 US-10-684-200-89 7 US-10-684-200-89 7 US-10-684-200-89 7 US-10-684-200-89 7 US-10-684-200-89 7 US-10-684-200-89 7 US-10-682-003-7 8 US-10-682-003-7 8 US-10-682-003-7 8 US-10-682-003-15 8 US-10-682-003-15 8 US-10-682-003-15 8 US-10-682-003-15 8 US-10-682-003-15 8 US-10-682-003-15 9 US-09-990-9184-86-52 10 US-09-990-9184-6 11 US-10-082-0184-12 11 US-10-082-014-12 11 US-10-082-014-12 11 US-10-082-014-12 11 US-10-082-014-12 11 US-10-082-014-12	
<u> </u>	22222222222222222222222222222222222222
1100 1100 1100 1100 1100 1100 1100 110	1999 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000
109, App 109, App 109, App 109, App 109, App 109, App 109, App 108, App 108, App 108, App 108, App 108, App 108, App 109, App 109, App 109, App 109, App 119, App 119	27, Appl 18, Appl 18, Appl 11, Appl 12, Appl 13, Appl 14, Appl 17, Appl 17, Appl 115, App 115, App 115, App 115, Appl 115, Appl 115, Appl 115, Appl 115, Appl 115, Appl 116, Appl 117, Appl 118, Appl 118, Appl 119, Appl 110, Appl
Sequence seq	ednence advence eduence eduenc
15 US-10-367-594-109 15 US-10-367-654-109 15 US-10-367-668-109 15 US-10-367-668-109 16 US-10-367-668-109 16 US-10-633-624-68 16 US-10-633-624-68 16 US-10-777-053-533 16 US-10-777-053-533 16 US-10-777-053-533 16 US-10-777-053-533 16 US-10-813-426-88 16 US-10-813-426-89 17 US-10-813-426-88 18 US-10-813-746-68 19 US-10-813-746-68 10 US-10-813-746-68 11 US-10-062-711-24 11 US-10-059-271-24 12 US-10-059-271-24 13 US-10-059-271-24 14 US-10-059-271-24 15 US-10-059-271-35 17 US-10-059-271-36 18 US-10-059-271-36 19 US-10-059-271-37 19 US-10-059-271-39 10 US-10-059-271-39 11 US-10-059-271-39 12 US-10-059-271-39 13 US-10-059-271-39 14 US-10-059-271-39 15 US-10-059-271-39 16 US-10-059-271-39 17 US-10-059-271-39 18 US-10-059-271-39 19 US-10-059-271-39 19 US-10-059-271-39 19 US-10-059-271-39 10 US-09-96-40-21 10 US-09-96-40-21 10 US-09-96-40-21 11 US-0-239-313A-532 14 US-10-053-146 15 US-10-053-146 16 US-10-053-146 17 US-10-059-271-35 18 US-10-059-271-35 18 US-10-178-488-23 19 US-10-239-313A-532 19 US-10-053-146 19 US-10-053	14 US-10-039-271-27 Sequence 3 US-09-925-886-30 Sequence 3 US-09-925-886-30 Sequence 3 US-09-956-940-51 Sequence 10 US-09-956-940-51 Sequence 10 US-09-956-940-51 Sequence 17 US-06-613-018-23 Sequence 17 US-10-613-018-41 Sequence 17 US-10-613-018-42 Sequence 18 US-10-360-915 Sequence 19 US-10-360-915 Sequence 19 US-10-360-915 Sequence 19 US-10-360-915 Sequence 19 US-10-367-658-115 Sequence 19 US-10-367-658-110 Sequence 19 US-10-313-596-91 Sequence 19 US-10-313-596-91 Sequence 19 US-10-431-596-90 Se
15 US-10-367-594-109 Sequence 0 15 US-10-367-658-109 Sequence 0 15 US-10-367-658-109 Sequence 0 16 US-10-367-668-109 Sequence 0 16 US-10-367-668-109 Sequence 0 16 US-10-653-624-51 Sequence 0 16 US-10-653-624-51 Sequence 0 16 US-10-633-624-68 Sequence 0 16 US-10-833-439-68 Sequence 0 16 US-10-833-745-51 Sequence 0 16 US-10-833-745-51 Sequence 0 16 US-10-833-745-68 Sequence 0 16 US-10-833-745-51 Sequence 0 17 US-10-059-271-24 Sequence 0 17 US-10-059-271-34 Sequence 0 18 US-10-059-271-34 Sequence 0 19 US-10-059-271-34 Sequence 0 19 US-10-059-271-34 Sequence 0 19 US-10-059-271-35 Sequence 0 19 US-10-059-271-36 Sequence 0 19 US-10-059-271-36 Sequence 0 19 US-10-388-33 Sequenc	39.3 18 14 US-10-059-271-27 Sequence 3 18.5 9 US-09-825-886-30 Sequence 3 18.5 19 10 US-09-825-886-30 Sequence 3 17.7 15 15 US-01-0494-161-17 Sequence 3 17.7 15 17 US-10-613-018-41 Sequence 3 17.7 18 17 US-10-613-018-42 Sequence 3 17.7 18 17 US-10-613-018-42 Sequence 3 17.7 25 17 US-10-613-018-42 Sequence 3 17.7 25 17 US-10-613-018-42 Sequence 3 17.3 24 15 US-10-36-95-109 Sequence 3 17.3 24 15 US-10-36-95-109 Sequence 3 17.3 24 15 US-10-36-95-109 Sequence 3 17.3 24 15 US-10-36-59-115 Sequence 3 17.3 24 15 US-10-36-59-115 Sequence 3 17.3 24 15 US-10-36-64-115 Sequence 3 17.3 24 17 US-10-36-91 Sequence 3 17.3 24 15 US-10-36-64-115 Sequence 3 17.3 29 16 US-10-36-64-115 Sequence 3 17.3 29 16 US-10-36-64-115 Sequence 3 17.3 29 17 US-10-62-003-3 Sequence 3 17.3 29 17 US-10-63-64-20 Sequence 3 17 US-10-64-11 Sequenc

Fri Jun

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 25, Application US/10178488

Publication No. US20030165535A1

GENERAL INFORMATION;

APPLICANT: Rovinski, Benjamin

APPLICANT: Rovinski, Benjamin

APPLICANT: Roo, Shi-Xian

APPLICANT: Person, Roy

APPLICANT: Person, Roy

TITLE OF INVENTION: RETROVIRUS-LIKE PARTICLES MADE NON-INFECTIOUS BY A

TITLE OF INVENTION: PLUMALITY OF MUTATIONS

FILE REPREBUCE: 1038-1238 MIS

CURRENT PLICATION NUMBER: US/10/178,488

CURRENT FILING DATE: 2002-10-25

PRIOR APPLICATION NUMBER: 09/258,128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Synthetic HIV gpl20, variable region 3, aa 271-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Synthetic HIV gp120, variable region 3, aa 271-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 122; DB 17;
100.0%; Pred. No. 9.2e-12;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 122; DB 17;
Pred. No. 9.2e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
US-10-876-343A-31
Sequence 31, Application US/10876343A
Sequence 31, Application US/10876343A
Publication No. US20050106560A1
GENERAL INFORMATION:
TITLE OF INVENTION:
FILE REFERENCE: 100405-02121
CURRENT APPLICATION NUMBER: US/10/876,343A
CURRENT FILING DATE: 2004-06-23
PRIOR APPLICATION NUMBER: US 6,087,177
PRIOR APPLICATION NUMBER: US 6,087,177
NUMBER OF SEQ 1D NOS: 31
SOFTWARE: Patentin version 3.3
SEQ 1D NO 31
LEWOTT. 25
TANDER OF SEQ 1D NOS: 31
LEWOTT. 25
TANDER OF SEQ 1D NOS: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
CURRENT FILING DATE: 2004-06-23
PRIOR APPLICATION NUMBER: US 09/573,830
PRIOR FILING DATE: 2000-065-18
PRIOR PEPLICATION NUMBER: US 6,087,177
PRIOR FILING DATE: 1994-04-29
NUMBER OF SEQ ID NOS: 31
SOFTWARE: Patentin version 3.3
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%;
Matches 24; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-876-343A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-876-343A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INCHARATION:

GENERAL INCHARATION:

TITLE OF INVENTION:

TITLE O
Sequence 15, Appl Sequence 21, Appl Sequence 247, Appl Sequence 29, Appl Sequence 34, Appl Sequence 5, Appl Sequence 15, Appl Sequence 15, Appl Sequence 15, Appl Sequence 52, Appl Sequence 54, Appl Sequence 56, Appl Sequence 66, Appl Sequence 66, Appl Sequence 66, Appl Sequence 66, Appl Sequence 18, Appl Sequence 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 122; DB 17; 100.0%; Pred. No. 8.8e-12;
i US-10-213-742-15

i US-10-477-053-247

i US-10-753-339-6

US-09-810-310-29

I US-10-059-271-34

I US-10-059-271-34

US-10-059-271-34

US-10-059-271-37

I US-10-026-741-37

I US-10-213-742-16

I US-10-213-742-16

I US-10-311-111-4

I US-10-398-932-4

I US-10-380-926-36

I US-10-380-926-36

I US-10-380-926-36

I US-10-380-926-36

I US-10-380-926-36

I US-10-380-926-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-080-608A-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
US-10-876-343A-13
Sequence 13, Application US/10876343A
Sequence 13, Application US/10876343A
SENERAL INFORMATION:
APPLICANT: Wollstadter, Jacob N
STILE OF INVERTION: Selection Methods
FILE REFERENCE: 100405-02121
CURRENT APPLICATION NUMBER: US/10/876,343A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-621-675-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 160, Application US/10621675
Publication No. US20050049398A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
      Matches
```

셤 ઠે

```
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS
TITLE OF INVENTION: AND METHODS OF PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC
TITLE OF INVENTION: FUSION PROTEINS IN A MAMMALIAN CELL
FILER REFERENCE: ON107E/30436.18USD3
CURRENT APPLICATION NUMBER: US/10/283,610A
CURRENT FILING DATE: 2002-10-29
PRIOR APPLICATION NUMBER: 09/549,067
PRIOR PILING DATE: 2000-04-13
PRIOR FILING DATE: 1995-10-05
PRIOR FILING DATE: 1993-09-13
PRIOR FILING DATE: 1993-09-13
PRIOR FILING DATE: 1993-09-13
PRIOR PILING DATE: 1993-09-13
PRIOR PILING DATE: 1993-09-13
PRIOR PILING DATE: 1993-02-11
PRIOR FILING DATE: 1993-02-11
PRIOR PILING DATE: 1993-02-13
PRIOR FILING DATE: 1993-02-01
PRIOR FILING DATE: 1993-02-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24, Application US/09827345

Sequence 24, Application US/09827345

Bublication No. US20030021800A1

GENERAL INFORMATION:

APPLICANT: CHENCHANIO.

APPLICANT: CHENCHANIO.

APPLICANT: CHENCHANIO.

APPLICANT: CHENCHANIO.

TITLE OF INVENTION: VACCALE

TITLE OF INVENTION: UNTRACELLULAR PHABE, COMPOSITION FOR THE TREATMENT AND TITLE OF INVENTION: UNTRACELLULAR PHABE, COMPOSITION FOR THE TREATMENT ON UNTRACELLULAR PHABE, COMPOSITION ENTRANCELLULAR PHABE, COMPOSITION ENTRANCELLULAR PHABE, COMPOSITION DIAGNOSIS

TITLE OF INVENTION: DEREVENTION OF HIV INPECTIONS, ANTIBODIES AND METHOD OF TITLE OF INVENTION UNDERS: US/09/827,345

CURRENT APPLICATION NUMBER: 09/599,549

PRIOR FILLING DATE: 2000-06-23

PRIOR FILLING DATE: 1996-06-28

PRIOR FILLING DATE: 1996-06-28

PRIOR FILLING DATE: 1996-02-19

PRIOR FILLING DATE: 1996-02-19

PRIOR FILLING DATE: 1995-06-30

NUMBER OF SEQ ID NOS: 28

SOFTWARE: PACENTIN VOY. 2.1

SEQ ID NO 24

LENGTH: 20

THENTH: 20

THENTH: 20

THENTH: 20

THENTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide
US-09-827-345-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79.5%; Score 97; DB 10; L
100.0%; Pred. No. 5.5e-08;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
81.1%; Score 99; DB 15; L
Best Local Similarity 100.0%; Pred. No. 2.7e-08;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 RKSIRIQRGPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 RKSIRIQRGPGRAFVTIGKI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-09-827-345-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-283-610A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09813659
| Sequence 3, Application US/09813659
| Patent No. US20020012989Al
| GENERAL INFORMATION:
| APPLICANT: Linsley, Peter S. |
| APPLICANT: Linsley, Peter S. |
| APPLICANT: Bajorath, Unrgen |
| APPLICANT: Bill H. PETTY |
| APPLICANT: Gilliland, Lisa K. |
| TITLE OF INVENTION: EXPRESSION VECTORS ENCODING BISPECIFIC FUSION PROTEINS |
| TITLE OF INVENTION: EXPRESSION PRODUCING BIOLOGICALLY ACTIVE BISPECIFIC |
| TITLE OF INVENTION: EXPRESSION PROTEINS IN A MAMMALIAN CELL |
| TITLE OF INVENTION: EXPRESSION PROTEINS IN A MAMMALIAN CELL |
| TITLE OF INVENTION: PUSICON PROTEINS IN A MAMMALIAN CELL |
| TITLE OF INVENTION: PUBBER: US/09/813,659 |
| TITLE OF INVENTION: PUBBER: US/09/813,659 |
| FRICK FILING DATE: 1995-10-05 |
| PRIOR FILING DATE: 1995-10-05 |
| PRIOR FILING DATE: 1993-00-01 |
| PRIOR FILING DATE: 1993-00-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description of Unknown Organism: Artificial US-10-178-488-25
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 82.8%; Score 101; DB 14; Length 21; Best Local Similarity 95.2%; Pred. No. 1.4e-08; Matches 20; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.1%; Score 99; DB 9; Length 20; 100.0%; Pred. No. 2.7e-08; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/10283610A

Publication No. US20030219876A1

GENERAL INFORMATION:

APPLICANT: Ledbetter, Jeffrey A.

APPLICANT: Hayden, Martha S.

APPLICANT: Linsley, Peter S.

APPLICANT: Bajorath, Jurgen

APPLICANT: Fell, H. Perry

APPLICANT: Gilliland, Lisa K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 NTRKSIRIORGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NTRKRIRIQRGPGRAFVTIGK 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 RKSIRIQRGPGRAFVTIGKI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 RKSIRIQRGPGRAFVTIGKI 23
                              PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 25
LENGTH: 21
                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Unknown Organism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-283-610A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-813-659-3
                                                                                                                                                                                                                                                                                                      FEATURE:
```

ö

Gapa

;

0; Indels

Length 20;

g ઠે

ö

Gaps

ö

Indels

1 NNTRKSIRIQRGPGRAFVT 19 

g ò

셤

Length 20;

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE COTHER INFORMATION: ANTIGEN US-09-810-310-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Khleif, Samir N.
APPLICANT: Khleif, Samir N.
APPLICANT: Khleif, Samir N.
APPLICANT: Berzofeky, Jay A.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF
TITLE OF INVENTION: METHODS AND COMPOSITIONS TO PEPTIDE ANTIGENS
FILE REFERENCE: 15280-415100US
CURRENT APPLICATION NUMBER: US/09/810,310
CURRENT FILING DATE: 2001-03-14
PRIOR FILING DATE: 2000-03-15
NUMBER OF SEQ ID NOS: 61
SOFTWARE: Patentin Ver. 2.1
LENGTH: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 24, Application US/09810310 ".
Retent No. US2020049498A1
GENERAL INFORMATION:
APPLICANT: Khleif, Samir N.
APPLICANT: Berzoffsky, Jay A.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION C.
TITLE OF INVENTION: IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67.2%; Score 82; DB 14; Length 18; 100.0%; Pred. No. 1e-05; tive 0; Mismatches 0; Indels
                APPLICANT: Chu, Yong-Liang
APPLICANT: Chu, Jian-Tai
TITLE OF INVENTION: Polymeric Conjugates for Delivery of
TITLE OF INVENTION: Pelymeric Conjugates for Delivery of
TITLE OF INVENTION: WHC-Recognized Epitopes
TITLE OF INVENTION: Wia Peptide Vaccines
FILE REFERNCE: 3781-001-27;
CURRENT APPLICATION NUMBER: US/10/062,710
CURRENT FILING DATE: 2002-08
PRIOR FILIATION NUMBER: US 60/310,498
PRIOR FILIATION NUMBER: US 60/310,498
NUMBER OF SEQ ID NOS: 232
SOFTWARE: FALSEQ for Windows Version 4.0
SEQ ID NOS: 232
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63.1%; Score 77; DB 9; Length 15; 100.0%; Pred. No. 5.1e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: HIV Helper-T Cell Epitopes
US-10-062-710-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-810-310-15; Sequence 15, Application US/09810310; Patent No. US20020044948A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 IQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 igreperarvrickie 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 RIQRGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 1 RIORGPGRAFVTIGK 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 67.2
Best Local Similarity 100.
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 15; Conservative
APPLICANT: Li, Frank Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-810-310-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                           Sequence 1, Application US/10311111
PUBLICATE SHIBA, KIYOTAKA
GENERAL INFORMATION:
APPLICAVE SHIBA, KIYOTAKA
TITLE OF INVENTION:
FILE REFERENCE: 4439-4004
CURRENT APPLICATION NUMBER: US/10/311,111
CURRENT PILING DATE: 2002-12-13
PRIOR FILING DATE: 2000-06-16
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 20
THE PRIOR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: Synthetically Designed; JOTHER INFORMATION: Peptide
US-10-398-932-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 77.9%; Score 95; DB 14; Length 20; Best Local Similarity 95.0%; Pred. No. 1.1e-07; Matches 19; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 95; DB 16;
Pred. No. 1.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Designed peptide US-10-311-111-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-062-710-45;
Sequence 45, Application US/10062710;
Publication No. US20030049253A1;
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 RKSIRIQRGPGRTFVTIGKI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-398-932-1

, Sequence 1, Application US/10398932

; Publication No. US20040171803A1

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 RKSIRIQRGPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 RKSIRIQRGPGRAFVTIGKI 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 RKSIRIQRGPGRTFVTIGKI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 95.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: artificial
                          RESULT 8
US-10-311-111,-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE
```

셤

ö

셤

ð ĺ

ö

ö

Gaps

ö

Indels

Length 15;

```
GENERAL INVOCATION:

APPLICANT: Collier, R. John
APPLICANT: Blanke, Steven R.
APPLICANT: Blanke, Jill C.
APPLICANT: Banson, Exicka L.
APPLICANT: Banson, Exicka L.
APPLICANT: Ballard, Jimmy D.
APPLICANT: Stanbach, Michael N.
TITLE OF INVENTION: Handles for Delivering Compounds into Cells
FILE REPRENCE: 00246/187002
FILE REPRENCE: 00246/187002
CURRENT APPLICATION NUMBER: US/09/077,439A
CURRENT FILING DATE: 1999-04-08
CURRENT PILING DATE: 1996-02-13
PRIOR PILING DATE: 1996-06-07
PRIOR PILING DATE: 1996-06-07
PRIOR FILING DATE: 1996-12-13
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 15
                                                                                                                                                                                                                                                                    DB 10; L
5.1e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10; I
5.1e-05;
                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
CURRENT APPLICATION NUMBER: US/09/827,688
CURRENT FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: 60/195,680
PRIOR FILING DATE: 2000-04-07
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN VERSION 3.0
SEQ ID NO 9
                                                                                                                                                                                                                                                                    Score 77;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: June 3, 2005, 03:24:18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/09077439A Publication No. US20030202989A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63.1%; SCC_
100.0%; Pre
0;
                                                                                                                                                                                                                                                                           100.0%; F.
                                                                                                                                                                                                                                                                      63.1%;
                                                                                                                                                                                                                                                                                                                                                           8 RIQRGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 RIORGPGRAFVTIGK 15
                                                                                                                                                                                                                                                                    Query Match 63.1
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 63.1
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapien
                                                                                                                                                                               TYPE: PRT
ORGANISM: HIV p18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Job time : 140 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-077-439A-3
                                                                                                                                                                                                                         US-09-827-688-9
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 9, Application US/09827688
Publication No. US20030165476A1
GENERAL INFORMATION:
APPLICANT: ORSON, FRANK
APPLICANT: BHOGAL, BALBIR
TITLE OF INVENTION: AGENTS
TITLE OF INVENTION: AGENTS
TITLE OF INVENTION: AGENTS
FILE REFERENCE: P01949US1/10004014
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE OTHER INFORMATION: ANTIGEN
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 15;
                                                                                                                                                                                                                                                                                                                                                         63.1%; Score 77; DB 9; Length 15; 100.0%; Pred. No. 5.1e-05; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cheong, Hong-Seok
TITLE OF INVENTION: Liposomes Comprising Peptide Antigens
TITLE OF INVENTION: Derived from X Protein of Hepatitis F
TILE REFERENCE: 0136/08154
CURRENT APPLICATION NUMBER: US/09/989,621
CURRENT FILING DATE: 2001-11-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match . 63.1%; Score 77; DB 9; Le
Best Local Similarity 100.0%; Pred. No. 5.1e-05;
Matches 15; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Mogam Biotechnology Research Institute
APPLICANT: Kim, Tae-Youn
APPLICANT: Lee, Ki-Young
APPLICANT: Chang, Jin-Soo
APPLICANT: Cho, Sung-Yoo
APPLICANT: Hwang, Yu-Kyeong
APPLICANT: Cho, Myeong
FILE REFERENCE: 15280-415100US
CURRENT APPLICATION NUMBER: US/09/810,310
CURRENT FILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: 60/189,396
PRIOR PILING DATE: 2000-03-15
NUMBER OF SEQ ID NOS: 61
SEQ ID NO 24
LENGTH: 15
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 09/051,006
PRIOR FILING DATE: 2000-11-17
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASICEQ for Windows Version 3.0
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 8, Application US/09989621
; Patent No. US20020151683A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 RIQRGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 RIORGPGRAFVTIGK 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 RIORGPGRAFVTIGK 15
                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: HIV
US-09-989-621-8
                                                                                                                                                                                                                                                                                                               US-09-810-310-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-827-688-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 15
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                               FEATURE:
```

요

à

ö

Gaps

ô

Indels

Length 15;



**User Services** 

Online Exclusives

Magazine

Buyer's Guide

Product Info

Advertis:

Sanah	Glossary
	35ABCDEFGHIJKLMNOPQRSTUVWXYZ
©o Search Tips	Search: Go Word & Definition



Specify Multiple InfoLINK Numbers

ලා

**Syncytium** (plural, syncytia)

Multi-nucleate cells formed by the fusion of neighboring cells. Syncytia may form due to the expression of a viral fusion protein during viral replication.



Green fregue



development

- ■Current Iss
- ■Reader Sei
- ■Free Subsc

## Webeers

## Spring 2008 **Series**



### Upcoming \

- Protein Biomar
- Multiplexed Pro

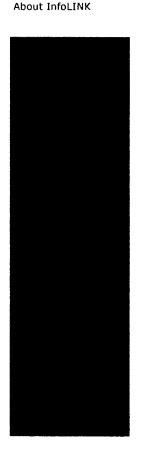
## View Webca

- HCS and Cel
- Whole Genor
- Cellular Imagi

## Bioscience E



Setting up a reagents or research? Click here to fir products availa Contact a varie email system q information.



This Page Blank (uspto)

Epitope o 9p120 V3 HIV-1 Btr HIV-1 Btr Binding B HIV-1 9p1

HIV-1 amp Virus neu Human imm

Fusion im Epitope c Antigenic HIV-1 str HIV-1 iso Human imm Retroviru

HIV-1 gp1 HIV gp120 HIV-1 V3-HIV-1 III HIV gp110 Peptide 1

Human imm

Human imm B cell ep HIV-1 Btr HIV-1 Btr HIV-1 Btr HIV-1 vac

seq1.rag

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

06:53:20 2005

m

Jun

Fri

protein search, using sw model protein ĕ Run on:

June 3, 2005, 03:02:32 ; Search time 156 Seconds (without alignments) 59.502 Million cell updates/sec

Title: Perfect score:

SEQ1 122 1 nntrksiriqrgpgrafvtigkig Sequence:

24

BLOSUM62DX Gapop 10.0 , Gapext 0.5 Scoring table:

2105692 segs, 386760381 residues Searched:

Total number of hits satisfying chosen parameters:

DB seq length: 0 DB seq length: 25 Minimum I Maximum I

Post-processing: Minimum Match 0% Maximum Match 100% . Listing first 250 summaries

A_Geneseq_16Dec04:* : geneseqp1980s:* : geneseqp1990s:* Database

geneseqp2000s:* geneseqp2001s:* geneseqp2002s:* geneseqp2003as:* geneseqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Rebult Ouery March Length DB ID  1 122 100.0 24 2 ARR06211 2 122 100.0 24 2 ARR06211 3 122 100.0 24 2 ARR06211 5 122 100.0 24 2 ARR29233 6 122 100.0 24 2 ARR39165 7 122 100.0 24 2 ARR39165 8 122 100.0 24 2 ARR39165 9 122 100.0 24 3 ARR39165 14 122 100.0 24 3 ARR39176 15 122 100.0 25 1 ARR39276 16 122 100.0 25 2 ARR39276 17 122 100.0 25 2 ARR39276 18 122 100.0 25 2 ARR331276 19 120 98.4 25 2 ARR33190 21 116 95.1 24 2 ARR33190 22 116 95.1 24 2 ARR33190 25 1 ARR9904 26 116 95.1 24 2 ARR39769			Description	Aar06211 Immunosup	Aar07018 Residues	Aar26565 Sequence	Aar29233 Heterocon	Aar26870 HIV gp120		Aar38165 V3 loop p	Aay22581 HIV LDL b	Aab15873 Human che	Aab68602 HIV gp120	Aap90281 Peptide 1		Aar31276 HIV princ	_	HIV	HΙΛ	O HIV	Aar41330 HIV 9p130	Aar04427 Human imm	Aay22583 HIV LDL b	Aar04502 Cpd. elic	Aar33190 Sequence	Aaw67414 HIV-1 pep	Aaw98904 HIV-1 vac	Aay39769 HIV1 chim
Score 122 122 122 122 122 122 122 122 122 12		SUMMARIES	αI	AAR06211	AAR07018	AAR26565	AAR29233	AAR26870	AAR32406	AAR38165	AAY22581	AAB15873	AAB68602	AAP90281	AAR08276	AAR31276.	AAR30031	AAR26712	AAR33222	AAR41336	AAR41330	AAR04427	AAY22583	AAR04502	AAR33190	AAW67414	AAW98904	AAY39769
Score 122 122 122 122 122 122 122 122 122 12	•		ength DB	24 2	24 2	24 2	24 2	24 2	24 2	24 2	24 2	24 3	24 4	25 1	25 2	25 2	25 2	25 2	25 2	25 2	25 2	25 2	24 2	23 2	24 2	24 2	24 2	24 2
ő l	•	مهل	Query Match L	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	6.7	95.1	95.1	95.1	95.1	95.1
ì			1	1 122	2 122	3 122	4 122	5 122	6 122	7 122	8 122		10 > 122	122		(Z)		•		17 122			20 118	21 116	22 116	23 116	24 116	25 116

Ξ;	> ≖	ш	o:	Ξ,Ξ	<b>m</b>	Ξ:	Įμ	· [22]	∢:	I I	Ξ.	α:	<b>x</b> 3	; X;	Ξ	<b>X</b> 3	: =	Ω.;	r, a	3 🎞	Ξ:	<b>= =</b>	Ξ:	H	> =	: 03	Ξ:	H 4	Ξ:	ΞC	r 0	<b>X</b> :	Ξb	n X	<b>x</b> :	Ξ,	> :	> >	·	Ξ,	Œ	> :	> võ	H	Ξ:	C =	<b>X</b>	<b>z</b> :	: ::	Ξ.	۶.	(<	4
1505	13658	48761	4215	20139	1312	47281	78513	r0406	19307	7 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	48556	10869	r5747	r6382	v5493	r1888	60203	90283	104479	v25898	<b>425850</b>	V6 / 366 199974	39699	020050	725471	15657	909522	234475	107537	63821	44190	58548	18878	722593	131277	26713	:27465	51219	725815	67331	Aay39690	95348	32407	68664	725834	99958	39756	18895	74608	24939	68326	52857	58618
_		_				-									_									_									_																				
505	6 5 4 4 7 4 4 7	8761	4215	24.00	1312	7281	8513 7684	0406	9307	7547	8556	9869	5747	6382	5493	1888	5020	9028	7447	2589	2585	9779 1997	3969	5707	2547	1565	3952	3447	753	5382	1419	5854	1887 1419	2259	3127	2671	2746	3121	2581	5733	AAY39690	9534	3240	9989	2583	9995	3975	1889	7460	2493	2632	5285	3861
7	N N	~	~	N C	1 (4)	~	m c	4 (7	~	N C	4 (4	4	<b>7</b>	n 01	0	ω -	* 0	н (	N C	4 7	~	N (	1 7	9	С3 ц	າທ	4	<b>~</b> ~	1 0	٥,	- ~	~	œ د	1 (1)	~ .	v ~	~	0 C	9 (7)	~ ~	4 (4	~ 0	v (	8	~ ~	v 0	~	æ r	- 73	~	א פ	ი ო	4
25	5 Z 2 Z 2 Z	25	55	2 2	25	25	22	212	21	27	21	21	22	7 2 2	20	20	202	25	2 5	707	50	0.0	202	20	200	0 0	25	23	22	4.0	18	18	18 24	18	18	19 1	21	21	21	21	21	17	11	17	17	11	17	17	24	16	9 7	10	16
'n.	ς α		٠. د		۲.	۲.	۰,		٠. د	, c		8			'n	o, c	; ;	6			ω.			ω.	۲,	: ;		φ.4		4.	 m	ë.			.i .	: -:					70.5	٠. د			σ.						o u	ດເດ	LO.
Η,		-	н.		(0	0	00	90	0	<b>-</b> -	, 0	0	00	0	0	100	່ວດ	97	7.6	96	96	9 9	96	96	9 5 6	9 7	95	93 193	91	6 6	9 6	06	0 0	8 8	87	87	86.5	٠a	98	98	8 8	820	8 8 7 5	85	85	8 8 5 5	82	82	. 8	81	8 6	81	81

HIV1 chim HIV gp120 V3 loop s HIV gp120 Strong im Human imm

Acceptor Human N-a Huran N-a Huran N-a Peptide C Peptide C Piplo V HIV-1 180-HIV-1 180-HIV-1 V HIV princ HIV princ HIV princ HIV Princ V 3 peptid V 3 peptid V 3 peptid C N 3 peptid C N 4 Pobride V 3 peptid C N 5 Pobrid

HIV-1 pep HIV-1 vac

HIV1 gag Variable V3 loop r Sequence

T cell ep HIV B-cel HIV-1 str

HIV1 chim HIV-1 V3

HIV helpe HIV-1 gp1

Altered N Altered N Altered N

variable Lipopepti Lipopepti Lipopepti Lipopepti Lipopepti Lipopepti Peptide P HIV-IIIB PHIV-IIIB PHIV-IIIB PHIV DELIA DALIGATION IMPRISON 

70.5 70 70 70 70 70 69

seq1.rag

HIV-1 III
HIV-1 III
HIV-1 III
HIV-1 IIII
HIV-1 IIII
HIV-1 IIIB
SP-10 LAV
SP-10 LII
HIV-1 III
HIV-1 LII
HIV-1 SPP
SPD-10 SPP Aar66430

Aar66424

Aar666424

Aar60663

Aar60663

Aar862655

Aaw16501

Aaw16501

Aaw16501

Aaw16501

Aaw16206

Aaw16206

Aar66425

Aar64467

Aar66426

Aar66427

Aar66426

Aar66427

Aar66427

Aar66427

Aar66427

Aar66428

Aar66438

Aar68603

Aar66438

Aar66443

Aar66438

Aar66443

Aar66438

Aar66443

Aar66438

Aar66443

Aar664443

Aar66443

Aar664443

Aar66443

Aar6644443

Aar66443

Aar66443

Aar6644441

Aar66443

Aar66443

Aar66444

06:53:20 2005

ന

Jun

Fri

```
ö
         HTLV SP-1
Alkaline
HTLV-III
SP-10 C r
SP-10 C p
                                                                                                                                                                                                                                                                                                                                                                                                         Protease inhibitor may be use to suppress organ transplant rejection without serious side effects. It may also be used in prevention and therapy of allergy, aplastic anaemia and systemic erythaematodes. See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Residues 301-324 of HIV gp 120 protein used in isolation of sulphated polysaccharide by affinity chromatography.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                            Protease inhibiting peptide immuno-suppressant - used to suppress rejection reaction in organs transplantation.
                                                                                                                                                                                                autoimmuna diasase; allergy; aplastic anaemia;
Aar60675 B
Aar58606 J
Aar58606 J
Aar85382 B
Aaw16525 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 122; DB 2; Length 24; 100.0%; Pred. No. 2.6e-10; Live 0; Mismatches 0; Indels
                                                                         ALIGNMENTS
         AAR60675
AAR58606
AAR85382
AAW16525
AAW73255
                                                                                                                                                                            rotease inhibitor
AAR40198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                       AAR06211 standard; peptide; 24 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR07018 standard; peptide; 24 AA
                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 181; 6pp; Japanese.
                                                                                                                                                                                                                                                                                    88JP-00310635
                                                                                                                                                                                                                                                                                                      88JP-00310635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HIV; AIDS; ARC; gp120; RP135
000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
                                                                                                                                                                                                                                                                                                                       (NITL ) NITTO DENKO CORP.
                                                                                                                                                                                                          systemic erythaematodes.
 WPI; 1990-233739/31.
                                                                                                                                                                                                Organ transplant;
                                                                                                                                                                               Immunosuppressant
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 24 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                      also AAR06212
                                                                                                                                                                                                                                               JP02157229-A.
                                                                                                                                                                                                                                                                                    07-DEC-1988;
                                                                                                                                                                                                                                                                                                      07-DEC-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-2003
18-JAN-1991
                                                                                                                                                                                                                                                                 18-JUN-1990
                                                                                                                                                                                                                            Synthetic.
99999
                                                                                                                                         AAR06211;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR07018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
                                                                                                    RESULT 1
AAR06211
245
244
247
248
249
250
                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 XXXXBBXZZXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
Prepn. of anti-HIV sulphated polysaccharide - by affinity chromatography using a resin-bound peptide corresp. to a HIV gp. 120 fragment.
                                                                                                                                                                                                                                                                Anti-HIV sulphated polysaccharide (SPS) can prevent syncytium formation in HIV infected C4 cells. SPS may be isolated by affinity chromatography with the given resin bound peptide fragment RP135. (Updated on 24-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence of peptide DB1 determined from the V3 principal neutralising domain (PND) region of HIV-1 strain HTLV-III B.
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bello C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic peptide(s) which enhance infectivity of HIV-1 in cellular cultures - are used for determining HIV-1 virus in blood and other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diagnostic; assay; detection; AIDS; human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                                                                                                                                                     Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dettin M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus 1; strain HTLV-III B.
                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 122; DB 2; 100.0%; Pred. No. 2.6e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Panozzo M,
                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SUPE-) INST SUPERIORE DI SANITA.
(CNDR ) CONSIGLIO NAZ DELLE RICERCHE.
                                                                                                                                                                                                                                                                                                                                                                                                       1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                     AAR26565 standard; peptide; 24 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammano F,
                                                                                                                                                                                                                                        Disclosure; Page ?; 34pp; English
Human immunodeficiency virus 1.
                                                                                                                               (RICH ) MERRELL DOW PHARM INC
                                                                                           89US-00295856.
89US-00375795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92WO-EP000187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91IT-MI000220.
                                                                      90CA-02007258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
                                                                                                                                                       Cardin AD, Jackson RL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pasti M,
                                                                                                                                                                                WPI; 1990-290631/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1992-299983/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               De Rossi A, Past
Chieco-Bianchi L;
                                                                                                                                                                                                                                                                                                                              Sequence 24 AA;
                                                                    05-JAN-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-1991;
                                                                                              11-JAN-1989;
                                                                                                        05-JUL-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9213882-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-1992;
                      CA2007258-A
                                               11-JUL-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-OCT-2003
25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR26565;
                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
SXCCCCCCXXXXIXXBXXIXXBXXIXXSX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74X8X711X88X3X6X6X6X6X6
                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

ö

```
The principal neutralizing domain (PND) of HIV-1 corresp. to a 24- amino acid sequence arranged in a loop determined by a disulfide bridge in the third hypervariable region, V3, of the protein gp 120. The central portion of the V3-PND contains a sequence which is highly conserved in different HIV-1 isolated strains, whereas the amino acids flanking this sequence are variable. The antigenic properties of V3 region are known to be virus-specific, antibodies elicited by MN-derived peptide do not neutralize HIV.II B virus and vice-versa. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to standardise OS field)
                                         Claim 1; Page 17; 31pp; English.
materials
                                                                                                                                                                                                                                                                                                                                                       Sequence 24 AA;
    biological
```

100.0%; Score 122; DB 2; Length 24; 100.0%; Pred. No. 2.6e-10; ive 0; Mismatches 0; Indels 1 NNTRKSIRIORGPGRAFVTIGKIG 24 1 Similarity 100. 24; Conservative Query Match Best Local S Matches ઠે g

AAR29233 standard; peptide; 24 AA AAR29233; RESULT 4 AAR29233 

(revised)
(first entry) 25-MAR-2003 14-APR-1993 Heteroconjugate antibody immunogen RP135 (IIIB).

V3 loop; gp41; envelope protein; MN; prototype; virus; varient; HIV; homology; heteroconjugate; enzyme; epitope mapping; replication; conjugate; immunogenic carrier; keyhole limpet hemocyanin; KIH; ovalbumin; succinyl maleimidomethyl cyclohexanyloarboxylate; SMCC.

Synthetic.

Location/Qualifiers 24 Misc-difference

_note= "Not in the natural sequence of this isolate"

WO9220373-A1

26-NOV-1992

92WO-US003616 29-APR-1992; 91US-00699773 14-MAY-1991;

(REPK ) REPLIGEN CORP.

Potts BJ; Higgins PJ,

WPI; 1992-415475/50.

t Hetero-conjugate antibodies for treating HIV infections - comprise an antibody specific for an effector cell surface antigen and an antibody a V3 loop of GP-120 envelope protein of HIV. Disclosure; Page 19; 69pp; English.

The sequences given in AAR29226-15 represent peptides which were used as immunogens for the production of antibodies against HIV. These peptides may be either unconjugated or conjugated to an immunogenic carrier, eg. a keyhole limpet hemocyanin (KLH) or ovalbumin, using succinyl

maleimidomethyl cyclohexanylcarboxylate (SMCC) as a conjugating agent. Viruses containing these or similar sequences may be recognised by the heteroconjugate enzymes of the invention. The antibodies raised against these sequences may be identified by standard epitope mapping techniques. These antibodies are apable, even at low concentrations, of nearly eliminating viral replication of different strains of HIV. (Updated on 25-MAR-2003 to correct PN field.)

Sequence 24 AA;

88888888888

ö Gaps ö Indels Length 100.0%; Score 122; DB 2; 100.0%; Pred. No. 2.6e-10; Mismatches ; Conservative Similarity 24; Conser Query Match Best Local Matches

1 NNTRKSIRIORGPGRAFVTIGKIG 24 

> g ð

AAR26870 standard; peptide; 24 AESULT 5

ö

Gaps

; 0

AAR26870;

Ş

(first entry) (revised) 20-MAY-1998 25-MAR-2003

Human immunodeficiency virus; AIDS; anti-gp120 antibodies. HIV gp120 V3 region binding assay peptide IIIB.

Synthetic

-1991; .6-SEP-19 -MAR-14 

92EP-00302064

91US-00668266. 92US-00894766. 06-MAR-1992;

PHARM CORP (IDEC-) IDEC

Chang-Yuil K;

WPI; 1992-309988/38.

aB - useful Anti-idiotype antibodies and methods for their selection -vaccines for the prevention and treatment of HIV infection.

Example, Page 9; 30pp; Japanese

The sequence is that of peptide IIIB, derived from the V3 region of HIV gpl20, it was used in binding assays for anti-gpl20 antibodies. The anti-gpl20 antibodies are useful in vaccine formulations for the treatment or prevention of HIV infection. See also AARX6867-RZ6873. (Updated on 25-WAR-2003 to correct PN field.) (Updated on 25-WAR-2003 to correct PR field.)

Sequence 24 AA;

Gaps ö Length 24; Indels 100.0%; Score 122; DB 2; 100.0%; Pred. No. 2.6e-10; ive 0; Mismatches 0; 24; Conservative Similarity Query Match Best Local Matches

ö

1 NNTRKSIRIQRGPGRAFVTIGKIG 24 

> ð 셤

RESULT 6 AAR32406

```
RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY22581
 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                   Nine peptides from the V3 regions of HIV-1 isolates IIIb, RF and MN were incorporated into tetravalent multiple antigen peptide systems (MAPS) see AAM32406-14). Parallel groups of three peptides with chain lengths spanning from 11-24 residues were synthesised in MAPS formate for each isolate. ELIS assays demonstrated that antisera titers in mice were closely related to the length of the IIIb peptide used for the immunisation - the longer the stronger the response. There was no substantial antibody prodn. in mice against the other two series of peptides, RF (B4-B6), and MN (B7-B9), except for a low reactivity in the gp. immunised with B8 (MN isolate). Specificity tests of the B cell response demonstrated that the T cell epitope (AAM32415) also serves as a B cell epitope. (Updated on 25-MAR-2003 to correct PN field.)
                                                                  Sequence of peptide B1 which comprises AAs 308-331 from the V3 region of HIV-1 isolate IIIb.
                                                                                                                                                                                                                                                                                                                New multiple antigen peptide(s) as HIV vaccines - include a dendritic core covalently bonded to peptide including the sequence IGPGR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 122; DB 2; Length 24; 100.0%; Pred. No. 2.6e-10; Live 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 NNTRKSIRIORGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1; vaccine; dendritic core; ss
AAR32406 standard; peptide; 24 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR38165 standard; peptide; 24 AA
                                                                                                                                                                                                                                                                                                                                                  Example, Fig 1; 35pp; English
                                                                                                                                                                                             92WO-US006688
                                                                                                                                                                                                                  91US-00744281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(revised)
(first entry)
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; Conservative
                                                                                                                                                                                                                                      (REPK ) REPLIGEN CORP.
(UYRQ ) UNIV ROCKEFELLER.
                                         (revised)
                                                                                                                                                                                                                                                                                           MPI; 1993-093730/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                       fam JP, Profy AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24 AA;
                                                                                                                                                                                            11-AUG-1992;
                                                                                                                                                                                                                   13-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-2003
25-MAR-2003
12-OCT-1993
                                                                                                                                                  409303766-A1
                                        25-MAR-2003
04-JUL-1993
                                                                                                                              Synthetic.
                    AAR32406;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR38165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
```

3p120; HIV-1; cytotoxic T-lymphocyte; CTL; T-helper; AIDS; infection

Human immunodeficiency virus 1

V3 loop peptide N24G.

ઠે

```
HIV gpl20 V3 loop-derived peptides (AAR38170-87) are successful in generating CTL responses, esp. peptide R15K (AAR38187); the T-helper cellinducing peptide includes the sequence C19A (AAR38164); HIV infection, inhibiting peptides are given in AR318188-206, and are esp. peptides R15K, N24G, E13V, R8K, T13Q and H13N (AAR38165-69). The peptides may also be derived from an influenza virus protein or a sendai virus protein (AAR41014-15). It was observed that peptide N24G (amino acids 308-311), with sequences derived from the V3 loop of HIV-1 IIIB, inhibits HIV-1 infection of primary human T cells by 92% at 1 microg/ml (ca. 0.4-0.6 microM). (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG
                                                                                                                                                                                                                                                                                                      Peptide composition for treating and preventing viral infections - comprise CTL-inducing epitope and HIV infection-inhibiting sequence or T helper cell-inducing sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV; LDL; low density lipoprotein; human; immune response; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunodeficiency, neoplastic tissue, myalgic encephalomyelitis; ME; viral infection failgue syndrome; tuberculoasis, hepstitis, AIDS, ARC, acquired immunodeficiency syndrome; AIDS related complex; HIV-infected CD4 cell; immunosuppressive peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IndelB
                                                                                                                                                                                                                            Arlinghaus RB, Platsoucas CD, Nehete PN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 122; DB 2; 100.0%; Pred. No. 2.6e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV LDL binding peptide, sequence A.
                                                                                                                                                                                                                                                                                                                                                                                               Claim 19; Page 95; 130pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY22581 standard; peptide; 24 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus 1.
                                                                             92WO-US010378.
                                                                                                                    91US-00800932.
92US-00945865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0072980P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-IB000149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                   UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PREN/) PRENDERGAST P T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
                                                                                                                                                                                                                                                                   WPI; 2993-196739/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 24 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JAN-1998;
WO9310816-A1
                                                                             02-DEC-1992;
                                                                                                                       02-DEC-1991;
                                                                                                                                            16-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9938524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JAN-1999;
                                      10-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-OCT-2003
19-OCT-1999
                                                                                                                                                                                                                            Sastin Jk,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY22581;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
```

ö

This sequence represents a HIV sequence that binds human low density conjugated (LDL), and is designated sequence "A". The invention relates to a method for enhancing the immune response in a patient with a condition, selected from immunodeficiency (due to a viral, bacterial, mycoplasmic, fungal or parasitic infection, or from the growth of conjugatic tissue), myalgic encephalomyelitis (ME), post inoculation or neoplastic tissue), myalgic encephalomyelitis (ME), post inoculation or comprises using a pharmaceutical composition, comprising a recombinant composition or or a minic molecule to the cysteine rich domain of LDL receptor. The human recombinant LDL receptor forms pharmaceutical compositions for: the treatment of acquired immunodeficiency syndrome (Compositions for: the reatment of acquired immunodeficiency syndrome (AIDS) or ARC (AIDS related complex); reducing syncytium formation in HIV infected CD4 cells; treating blood or body fluid or organs to contact the statement of animal host. The human recombinant LDL receptor is a human or animal host. The human recombinant LDL receptor is a highly specific inhibitor of HIV-1 replication in vitro. (Updated on 17-0CT-2003 to separations else field) Enhancing the immune response using a recombinant human low-density lipoprotein receptor, useful for treating viral infections, especially human immunodeficiency virus (HIV) infection. Claim 7; Page 19; 24pp; English. WPI; 1999-494040/41. Prendergast PT; 

Sequence 24 AA;

Gaps ö 100.0%; Score 122; DB 2; Length 24; 100.0%; Pred. No. 2.6e-10; 0; Indels Mismatches ö Conservative Query Match Best Local Similarity 24; Matches

1 NNTRKSIRIORGPGRAFVTIGKIG 24

> ò 원

AAB15873 standard; peptide; 24 AA RESULT 9 AAB15873 

(first entry) 17-JAN-2001 AAB15873;

Human chemokine derived peptide #25.

Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis; monocyte chemoattractant protein-1; inflammation; atheroselerosis; HIV; AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia; basophil-mediated disease; myocardial infarction; acute ischaemia; rheumatoid arthritis; contraception.

Synthetic.

WO200042071-A2.

20-JUL-2000

12-JAN-2000; 2000WO-US000821

99US-00229071. 99US-00271192. 99US-00452406. 12-JAN-1999; 17-MAR-1999; 01-DEC-1999;

(NEOR-) NEORX CORP

Grainger DJ, Tatalick LM;

WPI; 2000-499101/44.

New peptide 3, amide and heterocyclic compounds and saccharide conjugates used for inhibiting chemokine induced activity and for treating e.g. stroke, vascular diseases, autoimmune diseases and tumor growth.

Disclosure, Fig 18; 387pp; English

The present invention concerns the identification of a number of chemokines which can be used to produce derivatives, agonists and antagonists which are then useful in disease treatment. The chemokines include sequences AAB15813F85-B15794, AAB15803-B15813 and AAB15831-B15848. These chemokine derivatives can be used to treat diseases such as autoimmune diseases, atherosclerosis, osteoporosis, HIV infection and AIDS, psoriasis, inflammatory diseases, hypertension, basophil-mediated rheumatoid arthritis, and can be used to prevent strokes and as contraceptives. The coding sequences for the chemokines can be used in gene therapy for the same diseases, as well as in the production of animal models 

Sequence 24 AA;

ö Gaps ö Length 24; 0; Indels 100.0%; Score 122; DB 3; 100.0%; Pred. No. 2.6e-10; iive 0; Mismatches 0; 24; Conservative Query Match Best Local Similarity Matches

> g ò

RESULT 10

Ź AAB68602 standard; peptide; 24 AAB68602 

ö

AAB68602;

(first entry) (revised)

HIV gp120 V3 loop; liposome composition; HIV infection.

US6180134-B1.

30-JAN-2001

95US-00480332 07-JUN-1995; 93US-00035443 94US-00316436 23-MAR-1993; 29-SEP-1994;

(SEQU-) SEQUUS PHARM INC.

Martin FJ, Barenholz Y; Zalipsky S, Woodle MC,

WPI; 2001-201897/20.

Liposome composition for use in treating septic shock comprises liposomes having an outer surface layer of polyethylene glycol chains, and a polypeptide or polysaccharide effector molecule.

Disclosure; Fig 13; 32pp; English.

The present invention relates to a liposome composition comprising liposomes having an outer surface layer of polyethylene glycol chains, each having a free distal end. A polypeptide or polysaccharide effector

11-SEP-2003 25-APR-2001

HIV gp120 V3 loop peptide #2.

Human immunodeficiency virus 1.

```
ö
molecule is covalently attached to a portion of the distal ends. The effector interferes with specific binding of pathogen or cell in a bloodstream to a target cell or cell matrix, and is rapidly removed by renal clearance from the bloodstream when administered in free form. The lipsoeme composition may be used in treating a condition mediated by binding a pathogen or cell in the bloodstream, to a target cell or cell matrix. It can be used in treating septic shock, toxic shock, colonic inflammation, lenkaemic cell proliferation, or HIV infection. The present sequence is a peptide of the V3 loop of HIV envelope protein gpl20. This peptide may be used in the composition of the present invention. gpl20 indicated the present peptide, the CD4 receptors are blocked, thereby introducing they infection. (Updated on 11-SEP-2003 to standardise OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein derivative stimulates a lymphocyte proliferative response in HIV-
infected humans, providing a means of diagnosis, protection and
therapeutic value, (Updated on 25-MAR-2003 to correct PR field.) (Updated
on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to
standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lynn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prophylaxis or
HIV infection.
                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grimaila R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Revised record issued on 09-SEP-2004 : Correction to location
                                                                                                                                                                                                                                                     Length 24;
                                                                                                                                                                                                                                                                                 Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New HIV proteins and peptide(s) - used in diagnosis, therapy of AIDS, esp. for prepn. of vaccines against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Farley J,
                                                                                                                                                                                                                                                  100.0%; Score 122; DB 4;
100.0%; Pred. No. 2.6e-10;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jayaherian K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV; AIDS; env gene; HIV vaccine; ds.
                                                                                                                                                                                                                                                                                                              NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                              Simian-Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                    AAP90281 standard; protein; 25 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 27; 29pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87US-00090080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88EP-00307889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide 135 of HIV env gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                  Similarity 100.
24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
(revised)
(revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JR, Putney SD,
J, Okeeffe T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (REPK ) REPLIGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1989-070387/10.
                                                                                                                                                                                                                       Sequence 24 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-AUG-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jnidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
22-JUN-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-2004
24-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38-MAR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Petro J,
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAP90281;
                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rusche
                                                                                                                                                                                            field)
                                                                                                                                                                                                                                                                                                                                                                            ARESULT 17
                                                                                                                                                                                                                                                                                 Matches
   ઠે
                                                                                                                                                                                                                                                                                                                                          셤
```

Sequence 25 AA;

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        - composed of neutralising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This peptide is derived from the HIV IIIB isolate and is cross- reactive with the HIV major neutralisation determinant (MMtD). This MMtD is used in a conjugate, covalently linked to the outer membrane protein (GMP) from Neisseria, as an immunogen for vaccination against AIDS. A cocktail of different MNtD poly- peptides can be used. See also AAR08274-75 and
                     Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                           AIDS; ARC; conjugate immunogen; Neisseria outer membrane protein;
HIV major neutralisation determinant.
                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
 Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 25;
                     IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 122; DB 2; 100.0%; Pred. No. 2.7e-10;
Score 122; DB 1;
Pred. No. 2.7e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conjugate immunogen for AIDS and ARC treatment - determinant of HIV and Neisseria outer membrane.
                                                                                                                                                                                                                                                                                                                                                                                                               Larson VM;
                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                         1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                           1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                    HIV peptide fragment (IIIB isolate).
                                                                                                                                                                                                                                                                                                                                                                                                               Emini BA, Marburg S, Scolnick EM,
                                                                                                                     Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ź
                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 22; 24pp; English.
                                                                                                                     AAR08276 standard; protein; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25
100.0%;
                                                                                                                                                                                                                                                                                                                                  89US-00362176.
89US-00362177.
89US-00362178.
89US-00362179.
                                                                                                                                                                                                                                            Human immunodeficiency virus.
                                                                                                                                                                                                                                                                                                              90EP-00306082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR31276 standard; peptide;
                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.
Les 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         & CO INC
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1990-370100/50
           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 25 AA;
                                                                                                                                                                                                                                                                                                                                                                                         (MERI ) MERCK
Query Match
Best Local Simi
Matches 24;
                                                                                                                                                                                                                                                                                                             05-JUN-1990;
                                                                                                                                                                                                                                                                                                                                                        06-JUN-1989;
                                                                                                                                                                07-MAR-1991
                                                                                                                                                                                                                                                                                                                                    06-JUN-1989;
                                                                                                                                                                                                                                                                                                                                                . 1980 - JUN - 1989
                                                                                                                                                                                                                                                                                        12-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-FEB-1993
                                                                                                                                                                                                                                                                  EP402088-A.
                                                                                                                                           AAR08276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR31276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR08277
                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
                                                                                                         AAR31276
                                                          g
                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2X2XEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                             1
```

```
The invention relates to a co-conjugate comprising an immunogenic protein or protein complex having a first set of covalent linkages to low molecular weight moieties which have an anionic or polyamionic character at physiological ph, and a second set of covalent linkages to peptides comprising HIV principal neutralizing determinants (PND's) or immunologically equivalent peptides. Preferably at least one set of the covalent linkages is comprised of malemide derivatives; the (poly) anionic moiety is composed of one to five residues of the anionic form of a carboxylic, sulphonic or phosphonic acid; the immunogenic form of a carboxylic, sulphonic or phosphonic acid; the immunogenic moiety is the outer membrane protein complex (OMPC) of Neisseria meningitidis b; and the PND peptide has a linear structure, a disulphidebonded cyclic structure, an amide-bonded cyclic structure or a thioether-bonded cyclic structure. The present sequence (PNDISS) is an example of a bun carried an amide-bonded cyclic structure or a thioether-bond cyclic structure or a thioether-bond cyclic structure or a control of the present sequence (PNDISS) is an example of a bun carried the control of the contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PND peptide component used in the co-conjugate. The co-conjugate is useful for inducing anti-peptide immune response in mammals, for inducing the structuralizing antibodies in mammals, for formulating vaccines to prevent HIV infection or disease, including AIDS, or for treating humans afflicted with HIV infection or disease.
                                                                                                                                                                                                                          /note= "bonds to the OMPC of the conjugate via this site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conjugate proteins comprising HIV peptide components - useful for preparing vaccines for e.g. AIDS or for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                           AIDS; ARC; human immunodeficiency virus; vaccine; Neisseria; meningitidis b; outer membrane protein complex; OMPC; PND135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         v match 100.0%; Score 122; DB 2; Length 25; Local Similarity 100.0%; Pred. No. 2.7e-10; es 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Emini EA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV principle neutralising determinant 135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tolman RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR30031 standard; peptide; 25 AA.
HIV principal determinant peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Page 56; 63pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                    90US-00555339.
90US-00555966.
91US-00715276.
91US-00715278.
                                                                                                                                                                                                                                                                                                                                                                                      91EP-00306598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Leanza WJ, Marburg S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MERI ) MERCK & CO INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1992-026505/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 25 AA;
                                                                                                                                                                                    Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1990;
19-JUN-1991;
19-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUL-1990;
                                                                                                                                                                                                                                                                                                                                     22-JAN-1992
                                                                                                                                                                                                                                                                                     EP467700-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR30031;
                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BXZZZZZZ
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઢ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                          The peptide is HIV principle neutralising determinant (PND) 135 and is used as part of a conjugate comprising the major immune enhancing protein (MIEP) of Neisseria meningitidis covalently linked to the HIV PND. The conjugate may be used to oprepare vaccines against HIV infections, e.g. AIDS, as research tools for studying PND structure- function relationships, or as immunogens for use in the passive immunisation of humans. (Updated on 25-MAR-2003 to correct PN field.)
 Human immunodeficiency virus; AIDS; PND; MIEP; conjugate;
major immune enhancing protein; vaccine; anti-HIV antibodies; immunogen;
passive_immunisation.

    .1 Joins onto polysaccharide-protein complex via
/note= "Joins onto polysaccharide-protein complex via
lis site"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                           Conjugates of HIV-1 PND peptide(s) with the MIEP of Neisseria meningitidis - useful as a vaccine for treating and preventing HIV-1 infection, e.g. AIDS in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus; principal neutralizing determinant; outer membrane protein complex; OMPC; Neisseria; AIDS; PND135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 122; DB 2; ilarity 100.0%; Pred. No. 2.7e-10; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-PND-polysaccharide-protein conjugate vaccine.
                                                                                                                                                                                                                             Tolman RL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 NNTRKSIRIQRGPGRAFVTIGKĮG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 NNTRKSIRIQRGPGRAFVTIGKIG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR26712 standard; peptide; 25 AA
                                                                                                                                                                                                                                                                                                                                     Claim 9; Page 59; 66pp; English.
                                                                                                                                                                                                                             Emini A, Liu MA, Marburg S,
                                                                                                                                               92EP-00201693.
                                                                                                                                                                         91US-00715273.
                                                               Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                   (MERI ) MERCK & CO INC
                                                                                                                                                                                                                                                       WPI; 1992-425771/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
Modified-site
                                                                                                                                                                          19-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-FEB-1993
                                                                                                                                             11-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP468714-A.
                                                                                           EP519554-A1
                                                                                                                     23-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR26712;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR26712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

90US-00555558. 90US-00555558.

19-JUL-1990; 19-JUL-1990;

ö

```
The invention relates to a conjugate of an HIV principal neutralizing determinant (PND), or an immunologically equivalent peptide (PEP), covalently coupled to an immunogenic protein or protein complex through an anionic polysaccharide linker. Pref. the immunogenic protein is the outer membrane protein complex (OMPC) of Neisseria meningitidis b and the PND peptide has a linear structure, a disulphide-bonded cyclic structure, an amide-bonded cyclic structure. The present sequence (PND135) is an example of a PND peptide component. The conjugates are used for inducing HIV-neutralising antibodies or for making vaccines to prevent contraction of HIV infection or disease. The antibodies can be used for passively protecting against infection by HIV, or for protecting against proliferation of HIV post-infection, or for treating AIDS, or in diagnostic assays
                                                                                                                                                                                                            HIV peptide-polygaccharide-protein conjugates - used in vaccines or to produce antibodies to prevent or treat HIV infection.
                                                                                                                             Marburg S, Tolman RL, Emini EA;
                                                                                                                                                                                                                                                                              Claim 9; Page 57; 63pp; English
90US-00555974.
91US-00715275.
91US-00715277.
                                                                                   (MERI ) MERCK & CO INC.
                                                                                                                                                                    WPI; 1992-034437/05.
  19-JUL-1990;
19-JUN-1991;
19-JUN-1991;
```

Query Match 100.0%; Score 122; DB 2; Length 25; Best Local Similarity 100.0%; Pred. No. 2.7e-10; Matches 24; Conservative 0; Mismatches 0; Indels 1 NNTRKSIRIQRGPGRAFVTIGKIG 24 1 NNTRKSIRIORGPGRAFVTIGKIG 24 Sequence 25 AA; ò

ö

Gaps ö

Search completed: June 3, 2005, 03:17:35 Job time : 165 secs

a

seql.rag

This Page Blank (uspto)